C O M P E N D I U M
Open Educational Resources:
Cases from Latin America and Europe in Higher Education

E D I T O R S
Andreia Inamorato
Cristóbal Cobo
Celso Costa

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oportunidadproject.eu

oiioiioii Oxford Internet Institute
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Rafael Cuba Mancebo

Graphic Design

Cristina Cavallo

The OportUnidad Project aims to develop a common Higher Education arena between Latin America and Europe. This initiative is developed through institutional training in Open Educational Resources and the analysis of Open Educational Practices which are relevant to Universities directly involved in the project as well as collaborating Institutions. This Compendium was developed as part of the OportUnidad Project in collaboration with academics who contributed with case studies and/or interviews highlighting their experience in this field. **Special thanks to:**

AUTHORS

AGUILAR, José Vladimir Burgos
Universidad TECVirtual del Sistema Tecnológico de Monterrey, México
CABRERA, María del Carmen
Universidad Técnica Particular de Loja, Ecuador
CADME, Elizabeth
Universidad Técnica Particular de Loja, Ecuador
CASTRO, Valéria T.
Universidade Federal Fluminense, Brasil
CHICAIZA, Janneth
Universidad Técnica Particular de Loja, Ecuador
COBO, Cristóbal
Oxford Internet Institute, University of Oxford, UK
COSTA, Celso
Universidade Federal Fluminense, Brasil
JARA, Inés
Universidad Técnica Particular de Loja, Ecuador
LANE, Andy
Open University, UK
MAINA, Marcelo
Universitat Oberta de Catalunya, España
MANCEBO, Rafael Cuba
Universidade Federal Fluminense, Brasil
MARIANO, Sandra R. H.
Universidade Federal Fluminense, Brasil
PÉREZ-MATEO, Maria
Universitat Oberta de Catalunya, España
PIEDRA, Nelson
Universidad Técnica Particular de Loja, Ecuador
ROMERO, Audrey
Universidad Técnica Particular de Loja, Ecuador
SANTOS, Andreia Inamorato dos
Universidade Federal Fluminense, Brasil
SARANGO-LAPO, Celia Paola
Universidad Técnica Particular de Loja, Ecuador
SCHUWER, Robert
Open Universiteit, Netherlands
THOMSON, Simon
Leeds Metropolitan University, UK
TORRES, Diana
Universidad Técnica Particular de Loja, Ecuador
VILLAR-ONRUBIA, Daniel
Oxford Internet Institute, University of Oxford, UK

COLLABORATORS

AVORIO, Andre
University of Oxford, UK
BAYONA, Juan José
Universidad de Alicante, España
CANTONI, Mariella
Universidad Inca Garcilaso de la Vega, Perú
D'ANTONI, Susan
Advisor to the President, International OER Initiatives, Athabasca University, Canada
DÍAZ, Manuel
Universidad de La Empresa, Uruguay
FERREIRA, Giselle
Universidade Estácio de Sá, Brasil; Open University, UK
GUÀRDIA, Lourdes
Universitat Oberta de Catalunya, España
GUITERT, Montse
Universitat Oberta de Catalunya, España
HIGHTON, Melissa
University of Oxford, UK
LAW, Andrew
Open University, UK
LLORENS, Faraón
Universidad de Alicante, España
MASUDA, Masako Oya
Fundação Cecierj - Consórcio Cederj, Brasil
RAMA, Claudio
Universidad de La Empresa, Uruguay
ROMERO, Marc
Universitat Oberta de Catalunya, España
RUIZ, Javier Alberto Giese
Universidad TECVirtual del Sistema Tecnológico de Monterrey, México
SANGRÀ, Albert
Universitat Oberta de Catalunya, España
SINGLETON, Clarence
University of Oxford, UK
TEIXEIRA, Antonio
Universidade Aberta e Universidade de Lisboa, Portugal
TRUJILLO, John
Universidad EAFIT, Colombia
VALVERDE, Johnny Chavarría
Universidad Estatal a Distancia, Costa Rica

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Foreword

At the conclusion of the UNESCO meeting in 2002 that coined the term, Open Educational Resources (OER), the participants stated their hope that "this open resource for the future mobilizes the whole of the worldwide community of educators" . Significantly, they looked forward and foresaw the potential of both OER for educators and a global community. As a global community, they could reach beyond their institution and beyond their national borders to share with each other the resources they had created and to use the resources of others.

In the decade since that meeting, the Open Educational Resources movement has grown substantially– there are more and more initiatives in more and more countries. In a sector that is sometimes criticized for its slow pace of change, this is a significant development. Using digital technology to create resources and making them available with an open license by means of the Internet and the Web greatly enables the sharing. Yet, being aware of the considerable number and range of Open Educational Resources worldwide remains key to their use.

While sharing resources may be the vision of the OER movement, sharing information about OER initiatives themselves can inspire others to reflect and develop their own initiatives, and potentially to make connections. This compendium of case studies serves to illuminate a number of diverse OER initiatives in two regions, Latin America and Europe. The case studies can stimulate creativity and promote networking, collaboration and partnerships, across the ocean and around the world. The series of interviews complements the cases, providing context and commentary on some of the issues related to OER from the perspective of a number of prominent individuals.

Awareness of the scope and diversity of initiatives and approaches is key to advancing the OER movement, and this publication will make a timely contribution.

Susan D'Antoni

Susan D'Antoni is responsible for International OER Initiatives at Athabasca University and associated with the UNESCO/COL Chair in OER. The focus of her current work is a collaborative global mapping of institutional OER initiatives.

Previously she initiated and led the work on Open Educational Resources at UNESCO, first at the International Institute for Educational Planning (IIEP) and then in the Education Sector. While at IIEP she created and headed the Virtual Institute and undertook a study of the virtual university.

She began her career as Director of the Correspondence Education Project of the Canadian Association for Adult Education, and subsequently joined Ryerson University in Toronto as Co-ordinator of Distance Education Programmes. Seconded to Statistics Canada, she worked as Chief of Projections and Analysis in the Education Division, and then joined the Association of Universities and Colleges of Canada as Director of the Division of Research, Policy and Planning.

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[1]UNESCO. 2002. Forum on the Impact of Open Courseware for Higher Education in Developing Countries: final report. http://unesdoc.unesco.org/images/0012/001285/128515e.pdf

Introduction

Dr Andreia Inamorato dos Santos *(Universidade Federal Fluminense, Brasil)*
Dr Cristóbal Cobo *(University of Oxford, UK)*
Dr Giselle Ferreira *(Universidade Estácio de Sá, Brasil and Open University, UK)*

The term Open Educational Resources (OER), the English equivalent of REA, was coined in 2002 in discussions at the Forum on the Impact of Open Courseware UNESCO. It describes "the provision of educational resources on open license, enabled by information technologies and communication, for consultation, use and adaptation by a community of users with non-commercial purposes".

However, in the decade since its conception, OER / REA has come to signify not only those shared resources on the Web explicitly with the purpose of contributing to the democratization of knowledge, but in reality, a movement that now has the support of institutions, governments and individuals around the world.

With the support of UNESCO and a number of financial institutions, the OER movement differs from the sharing of open content on the Web in general, partly due to its emphasis on legal sharing and reuse, done under open licenses (eg , Creative Commons) and more recently due to growing concern over the creation of mechanisms for assessing quality.

Large projects such as the MIT OpenCourseWare, OpenLearn of the Open University in the UK, and Connexions of the Rice University, came to join a number of initiatives aiming not only the deployment of repositories for sharing on the Web, but also discussion and collaborative creation reuse practices, research methodologies and benchmarks of quality.

The movement in its current form is no longer occupied solely by questions relating to the sharing of resources itself, that is how to ensure interoperability between systems and platforms for sharing, how to approach and solve problems relating to copyright and mainly to ensure its sustainability. Such questions remain, of course, crucial, but more broadly an interest in the new features of Open Education has emerged, which has existed for decades, but now appropriates the OER in various contexts, including for informal learning. Institutionally, OER begins to be known as Open Educational Practices (OEP).

In June 2012, Community OER and UNESCO celebrated 10 years in the area of Open World Congress of Educational Resources in Paris, where the OER Paris Declaration 2012 was formally adopted. This calls on governments around the world to establish the adoption of open licenses for sharing knowledge produced with public funds.

OER constitutes a fascinating area involving activism, the creation and use of vanguard technologies, and public policy development. From this confluence emerges multiple topics for discussion, research and development. This is an area in its infancy, but given its intrinsic link with ICTs and their potential impact on education, perhaps OER will constitute one of the most significant developments to emerge in this century.

The Project OportUnidad, co-funded by the European Commission and comprising 12 universities (4 in Europe and 8 in Latin America) aims to bring OER to the educational practices of universities in Latin America. Despite celebrating 10 years of OER globally, it is clear that its concepts are still often unknown or misunderstood, and therefore need to be clarified and proliferated. University students, teachers and educational staff, as well as government representatives, need access to opportunities to reflect on the benefits that OER can bring to the process of formal and informal education. Access to information about existing practices is therefore essential because it allows the continued education of these professionals to enable them to make informed decisions about the applicability, benefits and challenges of OER and OEP in university education within their own contexts.

The Compendium we are presenting aims to fill part of that need for institutionalized information, and aims to discuss in a clear, didactic and realistic way, the experiences of selected higher education institutions which offer OER . They are case studies that we consider have something new and different to show, examples that we hope will serve as a source of information on the internal aspects of the institutionalization of the OER provision and use. . Through them we aim to show the trajectory of these organizations on their path to providing open education by means of web-based technologies.

This document provides a unique approach. It combines remarkable initiatives in the institutional development of OER in Higher Education institutions in the United Kingdom, the Netherlands and Spain with experiences from Higher Education institutions and universities from Brazil, Mexico, and Ecuador, which serve to enlighten the compendium with their innovative ideas and projects. The idea is to both illustrate and learn from notable experiences worldwide, to stimulate ideas and new initiatives in other institutions in the Latin-American region. Each case study focuses on certain characteristics that are not often discussed in the more general social debate around the importance of OER and addresses some of those practical and institutional questions that we often have without knowing who to ask.

This document has been developed in close collaboration with experts, researchers and decision makers from more than 10 universities in order to provide a global perspective of the OER movement. Some of the more relevant trends identified in this study are exemplified by a broad range of initiatives, including: change in the organizational culture; flexible certification; new business models; middle term institutional strategy; incentives policies; use of non-commercial open source or self-developed platforms; focus on champions; decentralized or federated solutions; open standards, bibliometric criteria; search engine optimization; community building and peer-based collaboration; quality assurance; repurposing and licensing; and open publishing policies. This multidimensional approach is considered strategic because it addresses the high quality, sustainable and regional effort towards OER needed to tackle a variety of challenges such as the integration of policies and challenges relating to technology, content and standards, as well as in particular facilitating the creation of a community of educators, students, users and administrators who are committed to the development of long term plans of action.

We hope this document will inspire the creation and implementation of new OER initiatives in Latin America, enabling the sharing of content and pedagogical practices both regionally and internationally.

Case Studies

UNICYCLE PROJECT

LEEDS METROPOLITAN UNIVERSITY, UNITED KINGDOM

By: Dr Andreia Inamorato dos Santos, *Universidade Federal Fluminense, Brasil* and Simon Thomson, *Leeds Metropolitan University, UK*
URL: http://repository.leedsmet.ac.uk/main/index.php
Target geographical area: UK but with global access through the Internet. Resources are in English.

The first round of OER projects in the UK involves the institutional repository of Leeds Metropolitan University (Leeds Met), which comprises open access research papers and open educational resources. The initiative started as part of the Unicycle Project, a JISC[1] funded pilot project to develop an OER repository at Leeds Met. The project was completed in April 2010 and resulted in 235 resources being made available under a CC BY NC SA 2.0 UK license. Currently the publication of resources in the repository is embedded in the academic practices.

Leeds Met Repository Open Search is an example of a well-structured repository, showcasing institutional research and academic production. Involving all faculties in the University, it presents clear goals and objectives, as well as providing an information kit on OER for university staff and other interested parties. Leeds Met has established a roadmap for OER implementation in a university through this JISC –supported start-up project and thereforeprovides a useful paradigm for those Latin American Universities planning to develop their own OER initiatives.

Figure 1: Home of Leeds Met Repository website

Initially, Leeds Met was given funding under the Repositories Start Up programme to establish an institutional repository. The project began with an institutional needs analysis which resulted in the decision to base the starting point for population of the repository on research outputs, with a clear mandate that the software platform should have the flexibility to also support outputs of assessment, learning and teaching, as well as a range of other materials.

The UniCycle Project is the name of the project which then supported the creation of the Leeds Met Open Resources Repository in its beginning. Leeds Met's aim is to build a central OER repository towhich staff members are able to contribute and upon which they can draw for teaching and research purposes. It also aims to open up access to the materials developed by the wider higher and further education sectors in the United Kingdom. Leeds Met was also concerned with promoting a cultural change at the University, by encouraging the

[1] Joint Information Systems Committee (United Kingdom) http://www.jisc.ac.uk/

sustainable use and production of OER by the staff members. This is done by supporting staff to incorporate and adapt quality-checked OER, and to identify appropriate tagging and technical requirements and share OER materials with college partners and the HE community via JORUM[2].
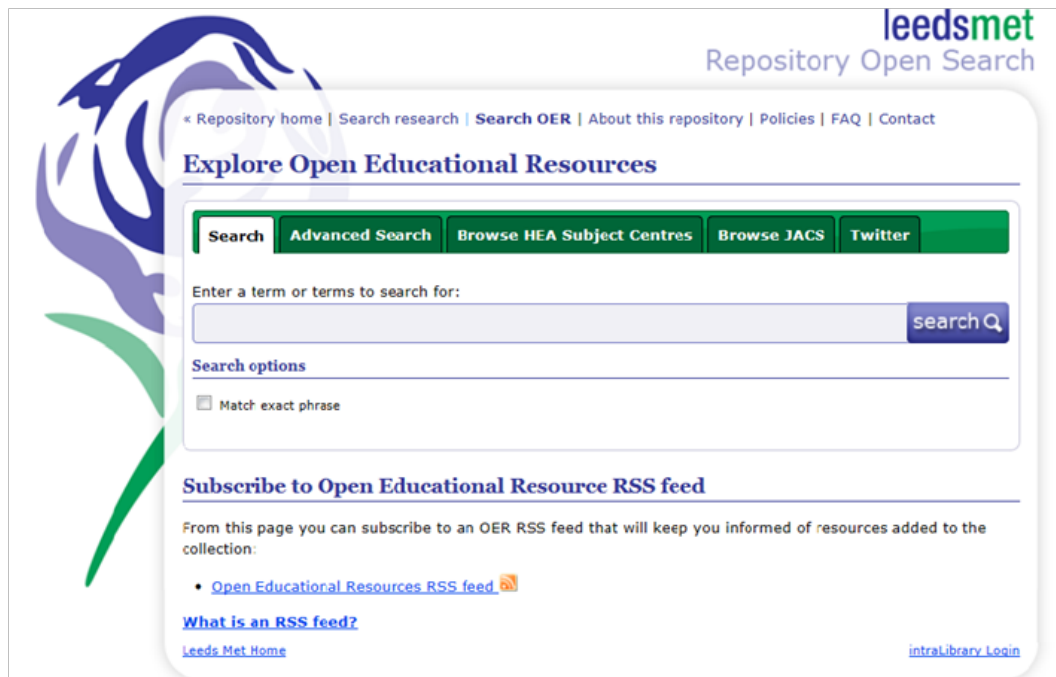
Figure 2: Entry page to OER search

The target audience is the University's lecturers and researchers, as well as students from Leeds Met and other associated colleges through their partnerships and collaborations (previously the RUN[3]).

OPEN ACCESS INITIATIVE AT LEEDS MET

The repository consists of research papers, conference materials and open educational resources. To be accepted into the repository, research papers need to have at least one author from Leeds Metropolitan University (Leeds Met), and OER need to have been produced at Leeds Met. Research papers are made available as PDFs and OER are available in a variety of formats including video lectures, audio files and text/image documents.

The main motivation behind releasing OER was to increase staff efficiency, by reducing reproduction of resources that already exist and by freeing up lecturers' time to concentrate on the learning experience for the students rather than on content creation. Leeds Met had not formally engaged in the release of OER materials prior to this project although there had been a very small number of individual staff who had used OER before. The project therefore also aimed toincrease awareness of OER within the institution and encourage faculties to release materials as OER.

A network of OER co-coordinators was created across faculties, with the aim of engaging staff members, identifying and collating resources, as well as ensuring the appropriate tagging of materials and meeting technical requirements. A learning technologist was available to deal with the actual deposit of materials in the repository. Submission of materials is entirely voluntary. Leeds Met believes that it is important to motivate staff members to submit materials beyond the personal motivation of sharing work, and through the performance and development review process (PDR), implements a programme of reward and recognition.

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[2]http://www.jorum.ac.uk/

[3]The Regional University Network (RUN) consists of 19 partner colleges, delivering Higher Education which is validated by Leeds Metropolitan University. Further information available at http://www.leedsmet.ac.uk/staff/regional-university-network-run.htm

INSTITUTIONAL POLICY

The existence of the initiative has been prompted by JISC. Key stakeholders were engaged early on in the project, namely the Technology Enhanced Group (TEL) and the Assessment, Learning and Teaching team (ALT), both headed by the pro-vice chancellor for Assessment, Learning and Teaching. Leeds Metropolitan University does not have a separate OER policy as it integrates OER related matters into established strategies such as the Learning & Teaching strategy, e-learning strategy as well as into annual plans for faculties and service areas.

Figure 3: Entry page to open access research database

Initially JISC funded, the project later became an internal university-funded programme. Since the Unicycle project Leeds Met have received no additional 3rd party funding for the OER work. Instead, the OER development now forms part of the fabric of the institution, embedding itself into established procedures and funded through the Library, Learning & Innovation service.

Faculties can release materials of their own choice and guidance on the appropriateness of such materials is given by faculties' OER coordinators. Lecturers are encouraged to release materials which have proven to be effective in the teaching and learning process. The Centre for Learning & Teaching promotes the use of OER as part of its work with staff development activities around curriculum design and e-learning.

TECHNOLOGICAL SOLUTIONS

The underlying technology is a commercial product called intraLibrary, which allows a number of features including key word searching, downloading in multiple formats, learning object metadata, among other features. It has required extensive in-house customisation. The metadata gathered for each resource can be classified as required and recommended, as follows:

> Required Metadata
>> □ Programme tag – ukoer
>> □ Title
>> □ Author / owner / contributor
>> □ Date
>> □ URL

Recommended Metadata
  ☐ Language
  ☐ Subject classifications
  ☐ Keywords
  ☐ Tags
  ☐ Comments
  ☐ Description

(Source: Final Leeds Met report to JISC, 2010)

The intraLibrary system allows bulk-export of IMS content packages to generate .zip files. The system also generates RSS feeds. One of the conditions of the UKOER programme funded by JISC is that all resources are made available both locally and via JorumOpen11[4]. In order for this to happen JorumOpen has incorporated an RSS reader into its repository and the bulk upload of IMS content packages have been used.

The "Open Search" interface is written in PHP and queries intraLibrary via SRU/SRW. It has required extensive in-house customisation and is non-trivial to reproduce though all code for the interface is Open Source.

Leeds Met has worked closely with JORUM to ensure both that institutional OER can be automatically disseminated to the national service repository (via OAI-PMH rather than the original method of bulk upload of IMS) and more recently that openly licensed material from across the sector can be harvested (again via OAI-PMH) from Jorum into our local repository (this is a new feature in intraLibrary v.3.6). In addition, the library has implemented the EBSCO Discovery Service which provides a for exploring a wide range of library resources including the library catalogue, electronic databases and, crucially, the repository, meaning we are able to configure the respective systems to enable library users to utilise the main library search facility to discover a wide range of openly licensed material from across the UK Higher Education sector.

OER IMPLEMENTATION PROCESS AND MOTIVATION TO SHARE CONTENT

An important feature in the initiative's implementation process is faculty support. Each Associate Dean for ALT was asked to identify a named person as Faculty co-ordinator for OER. This person would be responsible for the following within the Faculty:

• Gathering of materials from staff within the Faculty/Area.
• Managing local quality control, including IPR and copyright.
• Arrange staff development sessions to be run by the central project team.
• Disseminate information and good practice to the Faculty/Area.
• Liaise with the repository manager and learning technologist to co-ordinate material submission and provide feedback on process.
• Attend meetings and events to support the project as necessary.
• Liaise with the Faculty Associate Dean for ALT to align OER with other teaching and learning priorities.

Quality Control:

Initially quality control was to be managed centrally by regular meetings of the OER project manager, faculty reps and repository co-ordinators. It became apparent that each faculty had different needs with regards to quality and material identification so quality management was decentralised with each faculty managing their own quality control (based on the fact that they are best placed to assess quality within their own subject areas). IPR support and workshops were provided by the project team for faculties but each faculty was responsible for checking IPR and copyright within their own content.

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[4]Free UK teaching and learning resources repository http://www.jorum.ac.uk/

Among the motivations for sharing OER is Leeds Met's desire to develop further links with the RUN (Regional University Network) initiative. An OER repository seemed a strategic move for the provision of materials to support those students who are Leeds Met registered but are taught by RUN partners. Some other benefits include:

• Providing materials to enhance the learning experience of students who are Leeds Met registered but are taught at a RUN partner.
• Sharing teaching and learning materials between Leeds Met and RUN partners in order to align the student experience for students intending to progress on to Leeds Met awards.
• Solidifying progression agreements between Leeds Met & RUN college courses by setting out to develop shared OER resources as part of the course validation process.
• Formalising the sharing of supplemental learning materials to support student learning.
• Increasing the collaboration within course teams with RUN partners.

(Source: Unicycle Open Educational Resources Project Final Report, p. 20, 2010)

The institution has maintained its use of the OER repository and now has the following as a direct result of this project:

• Over 350 resources (and growing)
• 6 faculties engaged in professional development
• permanent repository manager
• OER resource use to be considered on all courses as part of review & refocus
• OER embedded part of Learning & Teaching strategy
• Since 1st August 2009 the repository has had 18,775 unique visitors from 151 different countries *(Source: Google Analytics)*
• Of these, 5,377 unique visitors were specifically looking for Open Educational Resources rather than research.

Statistics are accurate as of September 2011.

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Further reading
ACErep project - http://acerep.wordpress.com/about/
PORSCHE project - http://www.medev.ac.uk/ourwork/oer/PORSCHE/
Blog post: : http://repositorynews.wordpress.com/2012/05/16/discovering-ukoer-at-leeds-metropolitan/

OPEN-ER: A INITIATIVE IN OPEN EDUCATIONAL RESOURCES AT OPEN UNIVERSITY

NETHERLANDS

By: Dr Robert Schuwer, *Open Universiteit, Netherlands*
URL: http://www.opener.ou.nl
Target geographical area: Netherlands

INTRODUCTION

The Dutch Open Universiteit Nederland conducted this OER project (OpenER) between 2006-2008. Its aim was to bridge the gap between informal and formal learning and to establish a new portal to HE without barriers to entry.

About 10% of visitors reported that OER influenced their decisions to start some formal learning. The initiative has changed the attitude towards OER in the University and led to a growing awareness in the Netherlands of the value of OER.

Criteria for inclusion of courses
• Should give a good indication of the main subject areas in the School
• Initial Bachelor level
• Show how entertaining learning can be
• Be attractive for existing students
• Study load 25 hours
• Self contained
• In Dutch

A number of principles and features were changed during the project:
• Allow courses with study load other than 25 hour (ranging from 4 - 50 hours)
• Inclusion of one course in English
• Add courses developed from scratch
• Add a read-aloud version of some courses
• Add courses at an advanced level

At the end of the project 24 courses were delivered. There was also a second portal where 2 courses from excellent Dutch researchers were published. These researchers were winners from the Spinoza premium, the highest Dutch prize awarded each year to 3-4 researchers (each worth about €2.5M).

The format ranged from text (downloadable PDF) to fully web-based and interactive.

Attitudes within OUNL changed dramatically during the lifespan of the project. At the start faculty were reluctant, seeing this as giving away valuable resources for free and there were issues about the time investment. However, the project received positive media attention and attracted a high number of visitors which contributed to a more positive attitude towards the project.

OPTIONAL CERTIFICATION

Learners had the option of taking a formal examination for some of the courses. When a learner succeeds they will get a formal certificate (value 1 EC - European Creditpoint, about 25 hours of study) that can be converted into study points when they actually start some official trajectory at the Open University. This part of the experiment was closely linked to formal procedures at the Institution because of the official value a certificate possesses. It therefore took some persuading before this was actually made possible. Taking a formal exam costs the learner €50. Several dozen visitors took this option, the main reason being to have proof about certain competencies when seeking employment or promotion.

INSTITUTIONAL POLICIES AND PROCEDURES

The initiative was set up as a separate project under supervision of the Board. Faculties were approached to deliver courses for the initiative. External project funding was available so authors could be paid for their activities in delivering courses.

Using both top-down (visiting the deans) and bottom-up (contacting enthusiastic employees about delivering courses)approaches, and supported by internal communication via the intranet (including a weblog), has proven helpful in generating both course material for the initiative and acceptance of the project in general.

Having a board member as an OER advocate helps in cases of conflict. Because this experiment was set up as a project, the project leader had no power to force people to perform activities for it. In fact, doing anything in the project was dependent upon the willingness of people to join. In some cases this was not enough. It was necessary to use persuasion to make things happen.

RESOURCE FLOWS AND TECHNOLOGY

The project was funded through two grants. One grant (€500,000) came from the Directorate for Learning and Working from the Ministry of Education and Ministry of Economic Affairs. The other ($200,000) was from the William and Flora Hewlett Foundation. All courses offered were guided self - study courses.

OpenER was set up on a separate IT system so as not to interfere with existing institutional IT infrastructure, using the open Content Management System eduCommons. After the funding period ended, the course materials were made available through the university website.

IMPACT

Two surveys were conducted to measure the effect of OpenER. including data collection on the number of users that take the step from informal learning as offered by OpenER to formal learning as offered in our regular programmes.

To gather evidence that OpenER influences users in their purchase of a regular course, a question was added to the electronic order form: 'Was taking a free OpenER course a reason for ordering this course?' Users were obliged to answer this question with either 'yes' or 'no'. Over a period of four months 9% of people purchasing courses answered 'yes' to this question. This result was more or less in line with the findings of the survey that was conducted among visitors of the OpenER site who had registered themselves voluntarily. A total of 5769 questionnaires were sent out, with 980 responses. The question 'Did you apply for a (formal) study programme or did you buy some (non-free) course?' was answered as follows:
• Yes, at the OUNL: 42%
• Yes, at another university: 4%

- Yes, at a polytechnic: 5%
- Yes, at a commercial institute: 7%
- No: 30%
- Not filled in: 12%

The two surveys generated 2000 feedback forms that reveal a lot of valuable information for continuation of the project. Table 1 presents some findings from these surveys. There were two slightly different types of surveys. One was addressed to those users who only visited the site without going through a full course (Type A surveys) and the other was addressed to those who had gone through a course (Type B surveys). About 1600 forms were of Type A and 400 forms were of Type B.

Table 1. Survey findings.

Question	Result
Are you currently taking some form of formal education?	No: 70%
What is your highest level of education? (Only Type B)	Level below higher education: 43% (this was the actual target group)
Are you satisfied with the courses offered?	Yes: 93%
Do you have any plans to start a formal study? (Only Type B)	Yes: 85%
Does offering these free courses affect your study plans? (Only Type B)	Yes, I know I want to start some form of higher education: 49%
	Yes, I know I will NOT start some form of higher education: 3%
What is your age? (Only Type B)	25–54 years: 67% (these are people working and still far from retirement)

There were some unplanned outcomes. Maybe the most significant result is a growing awareness of the value OER can have for Dutch education. Because of the OpenER experiment, which was a pioneering OER initiative in the Netherlands, the OUNL became a credible national spokesman for the OER movement and its applications for Dutch education.

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OPENLEARN

OPEN UNIVERSITY, UNITED KINGDOM

By: Dr Andreia Inamorato dos Santos, *Universidade Federal Fluminense, Brasil* and Andy Lane, *Open University, UK*
Collaborator: Andrew Law, *Open University, UK*
URL:
http://www.open.edu/openlearn/
http://openlearn.open.ac.uk/
http://labspace.open.ac.uk/

INTRODUCTION TO THE INITIATIVE

OpenLearn is the name of the major institutional OER initiative of the Open University of the United Kingdom and its primary channel for publishing OER. It was initially supported by the William and Flora Hewlett Foundation, which has been supporting OER initiatives around the world since 2002. The Foundation contributed with $10 million (US dollars) for an initial two-year project (2006-2008). Since 2008 the OpenLearn initiative has largely been funded by the University at about the level of $2 million per annum and is now part of an established budget line in the University activities.

OpenLearn was initially launched as an Action Research project whose aims were to understand the practices around the provision and use of OER. It involved up to 30 staff drawn from all parts of the University (Lane, 2008; 2012a). At the time the OU committed to offer as OER up to 5% of its content by the end the 2-year funding period.

OpenLearn is a very comprehensive OER initiative, which involves different aspects of OER production and use: content provision, reuse, user-generated content, translations and localization. It also targets a range of users, such as: vulnerable groups, teachers, current students, prospective students, retired people, professionals, parents, prisoners and higher education institutions.
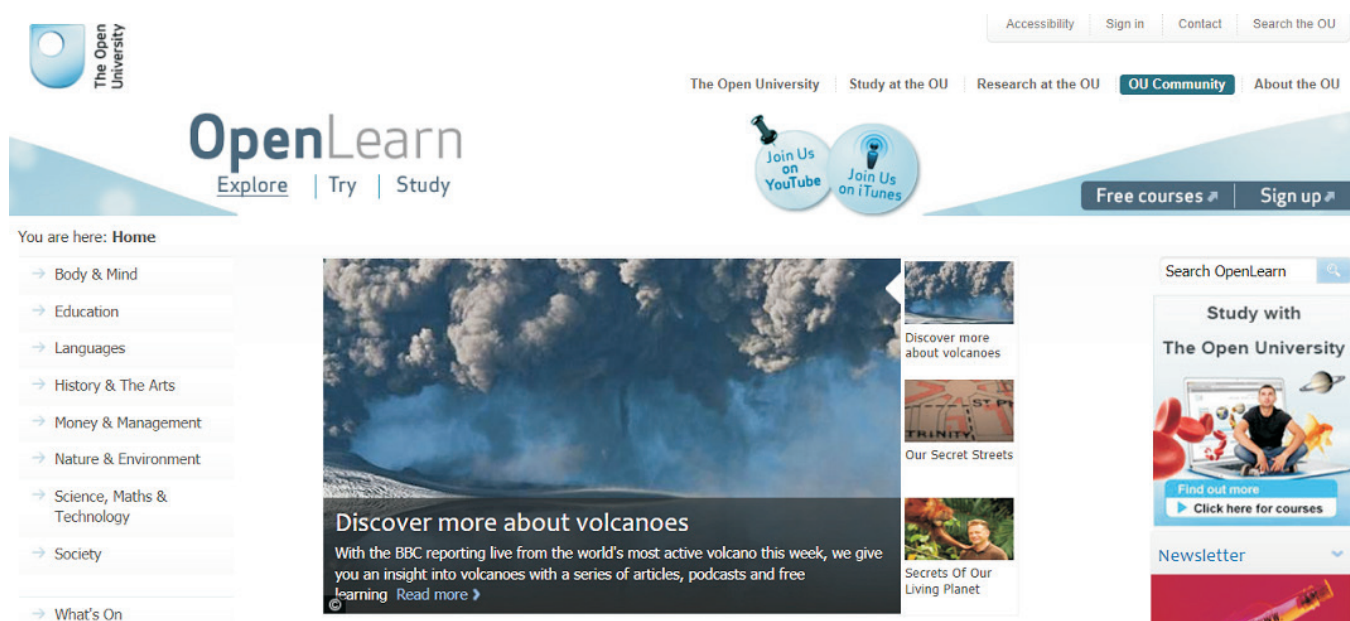
Figure 1: OpenLearn homepage

TECHNOLOGY FOR OER SHARING

OpenLearn is based on Moodle, the virtual learning environment (VLE) the OU adopts for its online courses. Moodle is open source, so it is in line with the philosophy supporting OER, which is open access. OpenLearn was initially created so that it would provide 2 twin websites: The Learning Space and the LabSpace. These are twin websites because the content is reproduced in both of them. However, the websites were designed to serve specific audiences. The Learning Space is primarily designed for learners. In there the learner can find OU content in different subject areas, and they can also create a profile and join a unit (word for 'course' in OpenLearn).

> **OpenLearn Highlight**
> Technology Use in the Provision of OER
> The Open University is now five years into offering open educational resources and amongst all the innovative aspects that OpenLearn is a model for, it is the use of technology to enable OER self-publishing and reuse that most stands out from other initiatives. In the LabSpace of OpenLearn the 4R's of OER can be practiced: reuse, redistribute, revise and remix.

The content can be downloaded, saved and printed if the learner prefers to read away from the computer screen. It is also possible to keep a learning journal and to take part in discussion forums related to the unit they are studying or more broad discussion forums in their subject area of interest. Learners can also personalise their learning environment by using the MyLearningSpace tool, which enables them to organise the units they are registered in and to keep up-to-date with the discussion forums they joined, all through the learning toolkit provided. In the Learning Space learners also have free access to tools that support learning, such as Compendium, a mind mapping software, and FM (previously known as Flashmeeting), a web-based video conference tool. These are tools developed by the OU itself. Learners can also create Learning Clubs, and develop their own community of peer virtual learners who are, interested in similar subject areas.

Figure 2: LabSpace home

The LabSpace is currently run by the OU SCORE initiative but is under review as SCORE funding finishes in 2012. It is aimed primarily at practitioners: teachers, lecturers and researchers. As its name suggests, it is an experimental place where users ca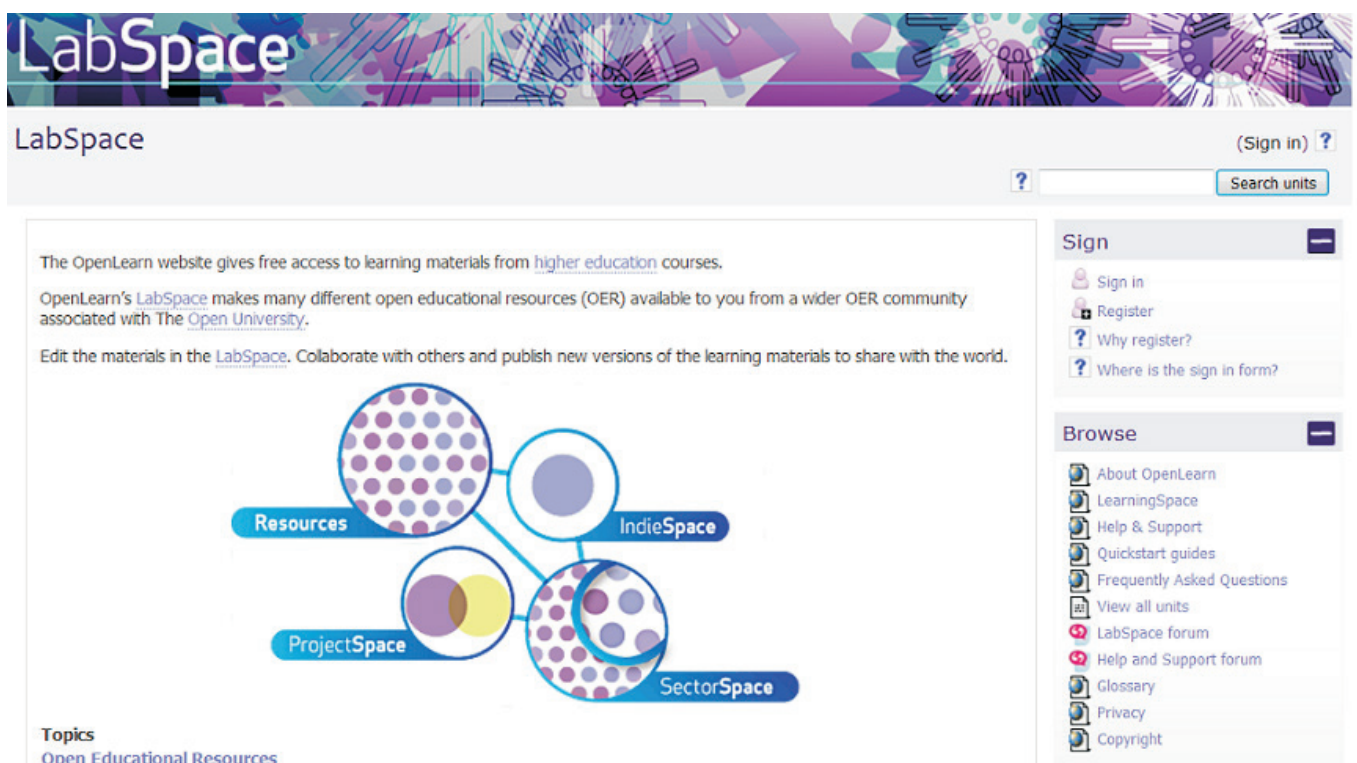n play with the content and tools. In the LabSpace users repurpose existing OpenLearn – Learning Space - content. The idea behind repurposing content in the LabSpace is that any new content produced or repurposed would be made available as an OER, contributing to the organic, growth of the repository. It also enables users to publish new content in a variety of languages, making it possible to share OER cross-culturally. Users can also have their own collaboration area in which to build experimental OER activities and host communities of practices.

> An interesting aspect of OpenLearn is technological innovation. Although it was conceptualised as early as 2006, it still is one of the most interactive OER repositories available, particularly because it offers the possibility for user-generated content to be published in the platform. It also offers a wide range of formats in which to download the materials.

OER GOVERNANCE AT THE INSTITUTIONAL LEVEL

When the value of OER and OpenLearn was established by the initial work (Lane, 2008; Gourley and Lane, 2008) a further 4 year period was needed to fully align the OER processes with existing OU processes. A major part of this was to integrate the responsibility for OpenLearn into an existing unit – the Open Broadcast Unit – that already dealt with public facing open access content via the BBC and a joint website known as Open2. net (Lane and Law, 2012).

The latter website was closed and much of the content transferred into a revamped OpenLearn website and the unit recast as the Open Media Unit. The new unit has also been able to take on responsibility for proprietary channels for publishing OU content such as YouTube and iTunes, so that similar material in different formats can be available on different channels. Also, while for the first 5 years most published OER was from legacy material with some bespoke content now most OER published is a by-product of existing content development processes (Schuwer et al, 2011)

Besides incorporating OpenLearn with the main activities of the University, the OU gained $5 million funding (2009-12) from the Higher Education Funding Council for England (HEFCE) for researching and disseminating best practice to the rest of the UK HE sector through various activities and fellowships, as well as for running SCORE (the Support Centre for Open Resources in Education - http://www8.open.ac.uk/score/), which has been responsible for the LabSpace of the OpenLearn.

OER at the OU is governed through the major University strategy documents such as the Learning and Teaching Strategy. It does have an open media operating policy to help staff understand how to engage with them and set the scale of open publishing (5% of content). Policy statements about its websites and copyright can be found at: http://www8.open.ac.uk/about/main/admin-and-governance/policies-and-statements.

OpenLearn is pushing boundaries both in terms of OER provision and OER use. In this sense, it opens up a new perspective for open educational practices. It is at the forefront in terms of OER provision but also in terms of opportunities and innovative academic practices. It allows both learners and educators to interact with the website in different ways, and to use its resources for their own purposes, be it for learning or teaching.

A SNAPSHOT OF THE OPENLEARN USE AND ACCESS

As of 1 June 2012 OpenLearn:
• Has had more than 21 million visits since its launch in 2006
• Averages 400,000 unique visitors a month
• Has around 11,000hours of learning materials including 8,000 hours taken from our undergraduate and postgraduate modules
• Has 631 active study units, plus educational interactives, topical videos, academic blogs, direct access to OU podcasts and opportunities to order free printed materials

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UNIVERSITY OF ALICANTE'S OPEN KNOWLEDGE STRATEGY

SPAIN

By: Daniel Villar-Onrubia and Dr Cristóbal Cobo, *Oxford Internet Institute, University of Oxford, UK*
Collaborators: Faraon Llorens and Juan José Bayona, *Universidad de Alicante, España*
URL:
http://ocw.ua.es/
http://rua.ua.es/
https://aplicacionesua.cpd.ua.es/album/educacion.asp

1. INTRODUCTION TO THE CASE

The University of Alicante (UA) stands out as a pioneering institution in adopting the creation and release of Open Educational Resources (OER) as a core underlying principle of its overall strategic orientation. Under the umbrella of the so-called UA 2.0 initiative, in 2007 the University launched three websites specifically devoted to the provision of open access to scholarly materials: an OpenCourseWare (OCW-UA), a digital repository (RUA) and a video collection (Portal Audiovisual UA). Most notably, the former was recognised in 2011 as a world-class initiative by the OCW Consortium, as it gave to UA the OCW Landmark Site Award (OCW Consortium 2011).

According to the statistics gathered by means of Google Analytics [1], 130,785 unique users viewed 596,892 pages of OCW-UA between September 2009 and August 2012. Likewise, between October 2009 and August 2012, 521,404 unique users viewed about 2,800,000 pages at RUA.[2] Most of the visits to both sites came from Spain, in the case of OCW-UA followed by Mexico (13.06%), Colombia (6.18%), Venezuela (4.74%), Peru (4.56%) and Argentina (3.25%) and, in the case of RUA, followed by Mexico (12.31%), Colombia (6.66%), Peru (5.17%), Argentina (4.66%) and Chile (3.66%).

Beyond the success of particular OER initiatives, UA is presented here as a case of best practice in relation to the development and implementation of an institutional strategy aimed at promoting the open dissemination of knowledge (Llorens et al. 2010), which is in turn integrated within a wider strategic framework devised in order to facilitate the adoption of digital technologies and innovative practices.

2. REDEFINING ORGANISATIONAL STRUCTURES

Among various changes in the organisational structure of UA, a milestone was the creation of a High-level Office for Technology and Educational Innovation [3] in 2005. The Library [4] and the Computing Services [5] were moved under this office, and a new sub-unit was created to offer support relating to innovation and learning technologies.[6]

Such an organisational re-structuring was highly beneficial to the identification of openness as one of the main principles to underlie UA's ICT strategy at several levels. In this regard, the awareness from librarians and IT staff of the open access and open source movements were mutually reinforced and formalised through an initiative known as Open Knowledge and Free Software at the University of Alicante – COPLA [7] (Llorens 2011a, 94; Llorens et al. 2010, 567).

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[1] Data supplied by the University of Alicante.

[2] It must be borne in mind that traffict to RUA was not recorded by Google Analytics from late February 2012 until late May 2012.

[3] The original name is Vicerrectorado de Tecnología e Innovación Educativa.

[4] http://www.ua.es/es/bibliotecas/index.html

[5] http://si.ua.es/

[5] http://si.ua.es/ite/

[7] The acronym stands for Coneixement Obert i Programari Lliure a la Universitat d'Alacant.

3. TECHNICAL SYSTEMS AND ORGANISATIONAL DYNAMICS AIMING TO ENHANCE THE RELEASE OF OPEN SCHOLARLY CONTENT

Over a four-years period (2005-08) UA embarked on an ambitious process of institutional change based on the uptake of digital technologies to enhance learning-teaching, research and management (Llorens 2009b). The process consisted of four stages: observation of relevant worldwide initiatives (2005), design of projects (2006), implementation (2007) and evaluation (2008). A similar process was replicated from 2009 to 2012 in order to keep UA's technology strategy up to date.

Apart from paying attention to open access repositories and the OCW initiative, in 2006 it also formalised its commitment by endorsing the Berlin Declaration on Open Access to Knowledge in Sciences and Humanities (Max Planck Society 2003). This phase of the project's design covered both technical and organisational aspects, requiring informed decision-making on technologies, standards and policies relevant to OER.

UA's platforms were devised as part of a cohesive media environment where all elements are connected from a technical point of view and with regard to organisational processes. Faculty members are expected to adopt a mainly do-it-yourself model of content release, so cohesion seems to be paramount. The interoperability of various platforms allowed contributors to get involved in OER gradually:

… the first challenge posed by the promotion of open knowledge was to persuade the teaching staff to self-archive in RUA the teaching materials which they had created, and which they had been using with their students, when they considered that these materials had reached the necessary degree of quality and usefulness. When those materials sufficed to cover the subject content, the next step was including their teaching project in OCW-UA. (Llorens et al. 2010, 568)
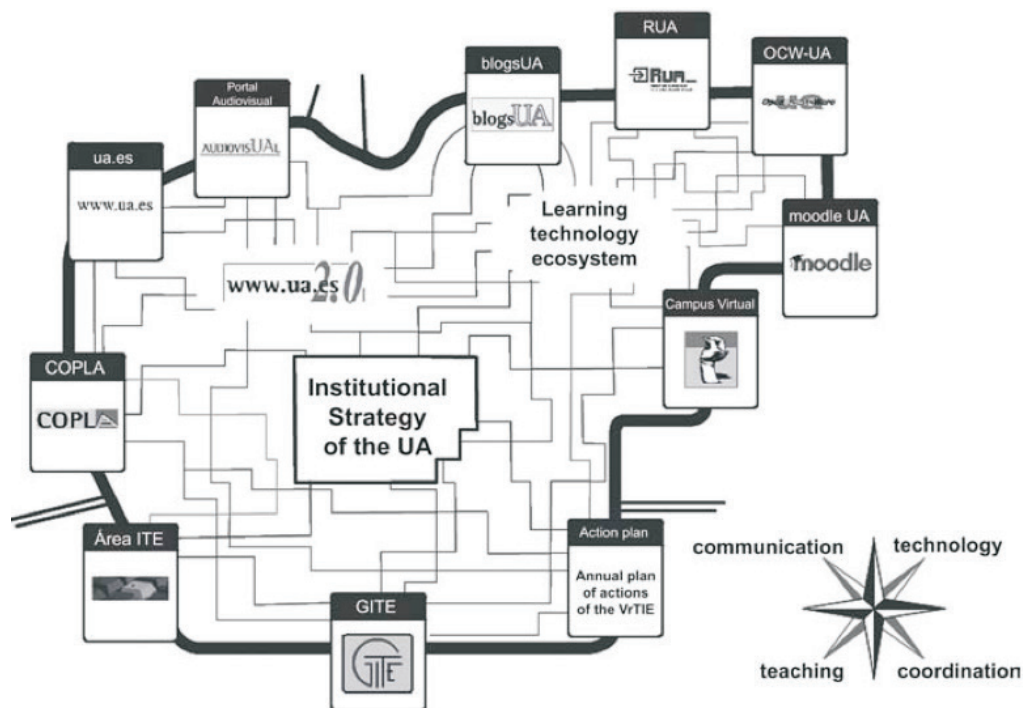

Figure 1: Learning technology ecosystem at UA
Originally published in Llorens et al. 2010, 568.

3.1. Technology choices

The use of free software was also regarded as a priority. The new initiatives made use of open sources systems such as DSpace or WordPress. Following the recommendations of the IT Group of Spain's Conference of University Rectors (CRUE TIC 2007), the use of open standards for the creation of files was actively incorporated into protocols. To simplify the experience of contributors some tools were specifically implemented. Moodle was used to enable the archiving of papers in RUA from the VLE, while another application allowed contributors to release podcasts in a single step across platforms. [8]

3.2. Support, Awareness-raising & Incentive Schemes

The development of technical solutions was accompanied by policy-making aimed at supporting the uptake of technology and OER dissemination. In this regard, the Library has played a key role in the provision of training and advice [9], as well as facilities properly equipped for the production of podcasts.

In terms of raising awareness, the system of blogs has been actively used to make OER initiatives better known both inside and outside UA. Both RUA and OCW-UA use their own blogs [10] to give updates and recommend content.

Incentive schemes are also a cornerstone of the OER strategy. Since 2007 the Pro-Vice-Chancellor's office has annually released a plan of actions consisting of different kinds of economic incentives (Llorens 2007; 2008; 2009a; 2010; 2011c; 2012a). One of the aid schemes encouraged the participation of faculty members in OCW-UA and the publication of materials in RUA's Teaching Section (Llorens 2011b). Participation in the repository has been also rewarded by means of the RUA Awards (Llorens 2011d).

Several incentives aimed to prompt collaboration around the shared goal of up-taking innovative practices. The creation of OER is thus encouraged by means of aid schemes aimed at research groups (Llorens 2011e) and techno-educational innovation groups – GITE (Llorens 2011f).

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[8] A brief summary of the audiovisual content production strategy might consulted at http://www.youtube.com/watch?v=eTVRX4s8aAo&list=PL22A493C1D5B08592&index=3&feature=plpp_video
[9] http://biblioteca.ua.es/es/fragua/servicios/asesoramiento-y-formacion.html
[10] http://blogs.ua.es/opencourseware and http://blogs.ua.es/repositorio/

Table 1: Aid Schemes relevant to OER available at UA in 2011

Name of the Aid Schemes	Total budget	Details
Grants to authors for the publication of courses in OCW-UA, requiring the self-archiving of materials in RUA	30,000 €	Up to 500 € per course
RUA Prizes: Research Section - Most active authors - Authors of most visited content Teaching Section - Most active authors - Authors of most visited content	3,750 €	First prize of 750 € and second prize of 500 € in each category.
Self-archiving of teaching materials, produced by techno-educational innovation groups (GITEs), in RUA.	7,500 €	Up to 500 € per GITE. Available to GITEs archiving at least 5 documents in the current current academic year.
Publication of courses in OCW-UA by techno-educational innovation groups (GITEs).	5,000 €	Up to 500 € per GITE.
Self-archiving of content in RUA's Research Section by research groups.	20,000 €	Up to 1,000 € per group.

While funds for the promotion of OER release were available at UA from 2007, most economic incentives have been discontinued in 2012 due to cuts in the University's budget. [11] The call for participation in OCW-UA released in 2012 does not include any type of grant (Llorens 2012b), and the RUA Awards are not part of the annual plan of actions (Llorens 2012a). In spite of this, funding for promoting the participation of GITEs in both RUA and OCW-UA is still available in 2012 (Llorens 2012c).

The main goal of economic incentives was "to make the repository better known, and under no circumstances were they meant to represent a payment for the materials placed in it" (Llorens et al. 2010, 573). With regard to motivations, data collected by means of a survey shows that among authors contributing to OCW-UA only 32.5 % of respondents indicated that they decided to get involved because of the economic incentive (Llorens et al. 2010, 579). Nevertheless, data must be approached with great care, as only 40 people completed that survey. Thus, it might be borne in mind that the depletion of funds available to support such practice might lead to less participation.

[10]http://web.ua.es/es/actualidad-universitaria/diciembre2011/diciembre2011-19-23/el-consejo-social-de-la-ua-aprueba-el-presupuesto-de-la-universidad-de-alicante-para-el-ejercicio-2012.html

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OPEN-UTPL: PROMOTION OF OPEN EDUCATIONAL PRACTICES AND OPENCOURSEWARE

ECUADOR

By: Mgs. Celia Paola Sarango-Lapo and Mgs. Inés Jara, *Dirección de Tecnologías para la Educación, Universidad Técnica Particular de Loja, Ecuador;* Ing. Nelson Piedra, Ing. Janeth Chicaiza, Ing. Audrey Romero, Ing. Elizabeth Cadme, Ing. Diana Torres and Ing. María del Carmen Cabrera, *Escuela de Ciencias de la Computación, Universidad Técnica Particular de Loja, Ecuador*
URL:
http://ocw.utpl.edu.ec/
http://eva.utpl.edu.ec/openutpl/

INTRODUCTION

The Universidad Técnica Particular de Loja (UTPL), which is committed to improving the educational experience of its students and supporting innovation in higher education, has joined the Open Access Movement and promoted the adoption of open educational practices and resources that enhance and complement academic processes. These initiatives are: 1) The UTPL Open Model [1] and 2) the accreditation of competences using Open Courseware contents (OCW).

In 2008, the Office of Educational Technology for Distance Learning created the UTPL Open-Model whose aim was to engage facilitators [1] in the creation, use, reuse and re-adaptation of Open Educational Resources (OERs) by applying Open Educational Practices (OEP, or PEA in Spanish). Two years later, the School of Computer Science (ECC) launched the UTPL-OCW project. This project enabled the University to become incorporated as a member of two global institutions, namely those institutions that would assume the role of promoting Open Courseware initiatives such as the Open Courseware Consortium (OCWC) and the Universia Ibero-American Network (OCW-Universia). Since its inception in 2008, the UTPL-OCW project has been producing and promoting OCW content. Moreover, through this OCW initiative, students from the School of Computer Science have received special accreditation for using OCW content.

The resources that were created via the UTPL Open-Model and OCW- courses have been released under a Creative Commons (CC) license. UTPL students requiring training in areas that they consider to be of interest may therefore freely access and use these OCW materials.

Below is a brief description of the initiatives and their academic impact in the teaching-learning process:

ACCREDITATION OF COMPETENCES VIA OPEN COURSEWARE CONTENT

It is important to stress that this initiative emerged within the framework of specific OER-related activities that were being carried out by UTPL. In section[2], a number of projects are discussed with their respective results.

In 2010, the UTPL-OCW Office, in collaboration with ECC, produced a document stipulating that students could receive accreditation for training in complementary courses and free electives via the OCW initiative. The students who completed their individual work and demonstrated mastery of the course contents would receive certificates of approval in the chosen field.

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[1] Facilitators are teachers.

As a university, UTPL is committed to selecting both quality OCW contents and supporting professional development (i.e. with the help of tutors), as well as developing evaluation processes for the accreditation of knowledge. By the same token, the University strives to apply fees that are not higher than administrative expenses. In this way, the fees for such training do not exceed those that are applied in the recognition of academic studies.

Four basic components were identified for the accreditation process via OCWs: 1) preparation, 2) enrollment, 3) academic follow-up and 4) accreditation. See Figure 1 below for more details.
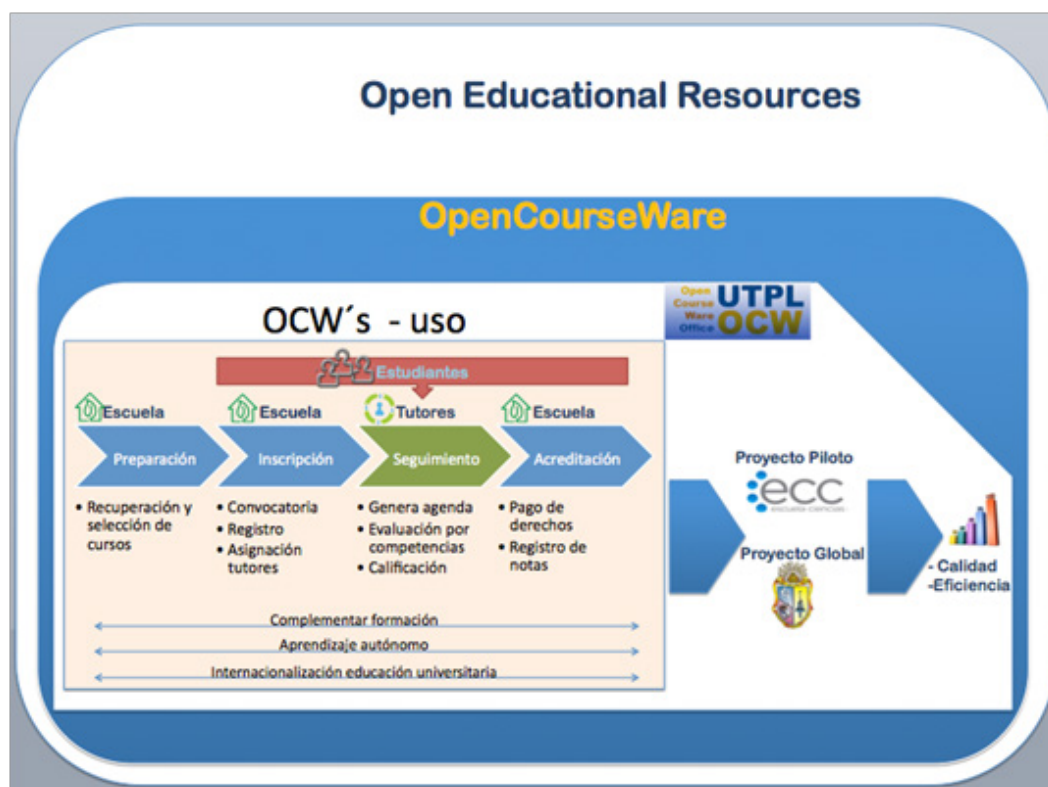
Figure 1: The UTPL-OCW model

PREPARATION

Key stages involved in pre-enrolment of OCW courses:
• Planning of topics of interest that helps to enrich and supplement the professional training of students.
• Identification, collection and management of OCW content; the two main sources that were used for selecting open content were: OCWC-and OCWC-Universia.
• Selection of OCW courses that meet academic, technical, and structural requirements, namely: OCW materials, didactic exercises, (best) practices, assessments, and didactic guides. It also includes infrastructural capacity and quality tutoring as defined by the ECC (OCW Content Quality) [3].
• Assigning of tutors to select OCW, namely those who will be responsible for developing an academic plan and supporting participants who enroll on OCW courses.
• Designing of an OCW academic plan for each course offered. In the academic plan, a number of competences are envisaged for training and assessment. In addition, the academic skills and/or prior knowledge of the students are to be taken into consideration. Also, the number of ECTS credits, the estimated number of hours of self-study, plus recommended activities, and the type of ECTS credits (whether free elective courses or complementary courses) are likewise taken into consideration.
• Preparation and promotion of a 'call for participation', i.e. for students interested in receiving accreditation of their skills via the self-study of OCW materials.

• Recovery of appropriate courses of interest, which complement the curriculum.
• Selection of OCW courses that meet the basic requirements (materials, drills and exercises, evaluations and tutorials) and defined quality criteria (Quality of OCW Content).

REGISTRATION

The parameters to be considered in the enrolment of OCW programs are:
• Verification of academic material: the available courses will be published/uploaded together with the academic requirements or previous knowledge.
• Letter of commitment - signed by each participant
• No fees policy- enrolled students will not be charged any fees

ACADEMIC FOLLOW-UP:

This corresponds to the work that is done to ensure that the initiative achieves its academic aims. Please refer to the roles and responsibilities in the diagram on the next page for more details.

For the academic follow-up, it is important to highlight that one of the key forms of assessment that guarantees the achievement of (student) competences is through the usage of "rubrics" [4].

ACCREDITATION

In order to meet the institutional standards required for accreditation, a minimum of 70% is required to pass the course, as shown in the following chart:
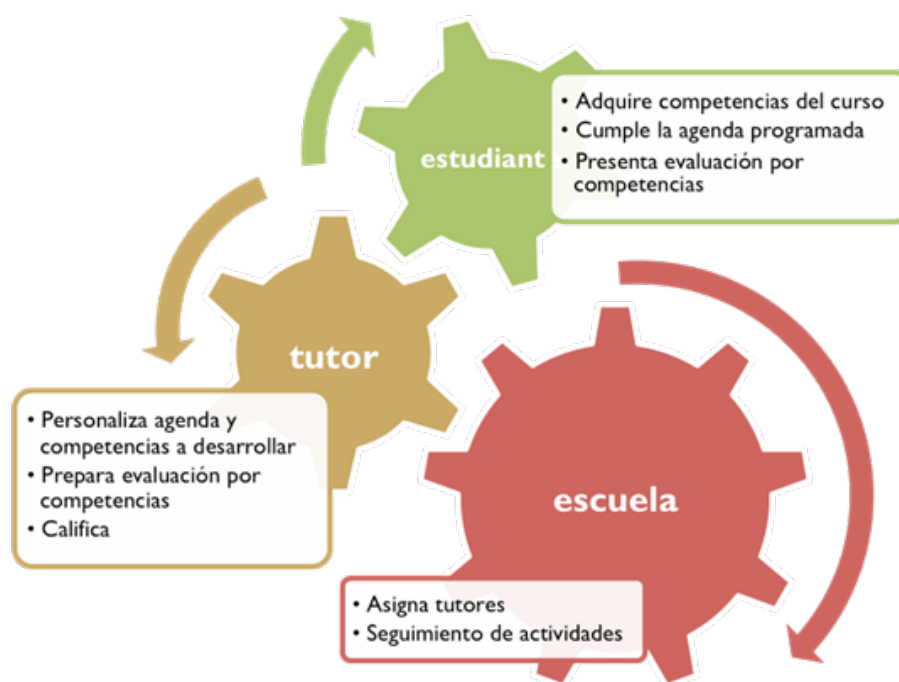

Figure 2: Roles and Responsibilities

Registering for an OCW course is free. The only expenses correspond to the cost of certification and any incurred administrative expenses (tutorials, secretarial/ administrative support, and academic management), i.e. for the recognition of academic studies.

RESOURCES

EVALUATION	
Activity	**Score**
Practice and Exercises	40%
Individual Assessment	60%
Total	100%

Below are details of the different resources used in the implementation of the pilot project, which was carried out at the School of Computer Science (UTPL) and followed the framework that was previously described.

Technicians/ Infrastructure
• Linux Server: Provided by UTPL.
• Educommons platform, content management system to support Open Courseware projects.
• Virtual Learning Environment: to do a follow-up of the course.
• Internet for access to virtual platforms.

Didactics
• OCW resources are related to Computer Science and are available in OCW repositories.
• Specifically, courses were chosen from the Polytechnic University of Madrid and the University of Carlos III of Madrid. The following criteria were considered: linkage with themes of interest, emerging themes in open courseware, the alignment of learning objectives and course content with the planned competencies of the students. In addition, we took into consideration 'completeness' and 'relevance' of the subject, plus structural issues (to facilitate students' independent work), as well as dominion and recognition of a specific field of knowledge, and not least the pedagogical design of OCW courses.

The Human factor:
• School Secretary: responsible for administrative paperwork for the approval of courses (according to subject).
• Tutors: voluntary facilitators who provide OCW enrolled students with academic counseling/advice.
• Motivated students
• UTPL-OCW Office personnel: guidance on using Open Educational Resources.
• In the section titled "Impact Assessment", we discuss the results obtained via the implementation of this initiative.

THE OPEN- UTPL MODEL

Open-UTPL encompasses three key elements: communication, resources and activities. This all forms part of an 'open source web architecture'. These elements are characterized, for example, by the usage of Web 2.0 tools, namely those which promote the development of a social and collaborative culture. They are of an open and social nature and highlight the philosophy that the student is at the center of the educational process and is part of a network of peers whose goal is educational training.

The technological open source architecture that we propose is part of an innovation process that stems from an educational model that is geared towards the Web 2.0 philosophy. This web philosophy allows UTPL facilitators and trainees to create their own content and to access open educational material that is of interest to them. In this way, a complex network of interactive relationships is created.
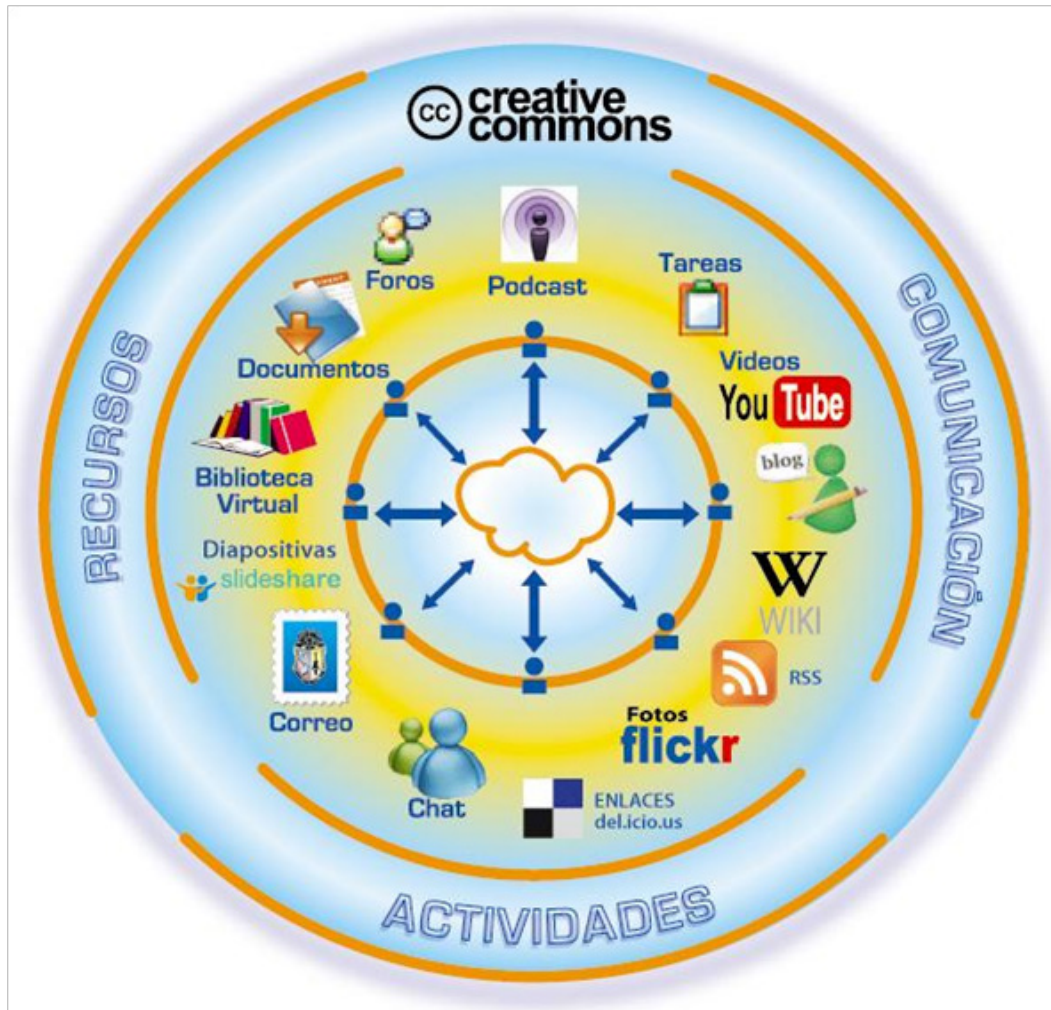
Figure 3: Diagram of the Open-UTPL conceptual model [2]

The Creative Commons (CC) license adopted by the institution (attribution- non-commercial and no Derivs), which can be of three types: 1) fine-grained Open Educational Resources (OA) such as: video tutorials of different subjects available on the You Tube[3] channel, materials in the form of presentations on the Slideshare[4] channel, audio (podcast[5]) archives that are played on standard audio devices, didactic guides, and distance evaluations in PDF format, among others, 2) coarse-grained educational resources (OCW) and 3) educational resources created via social interactions such as fora, wikis, blogs, del.icio.us, etc., which are defined as collaborative learning strategies in the component of activities in the Open-UTPL model.

Prior to the publication of the OERs in the virtual classroom by the facilitator, they are evaluated by those academic staff responsible for the materials. Templates have been established for these purposes, i.e. where valuation criteria are defined. In the same way, once the OERs have been published/uploaded, the student has the possibility of (e)valuating them by creating a ranking to categorize them according to their relevance, usefulness and quality. For publishing the OERs in the virtual classroom, there is an OER manager.

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[2] http://eva.utpl.edu.ec/openutpl/images/openUtpl/estructura.jpg
[3] www.youtube.com/videoconferencias
[4] www.slideshare.net/videoconferencias
[5] www.utpl.edu.ec/podcastutpl/

The inclusion of these Web 2.0[6] tools within the Open-UTPL model is done on a gradual basis. This ensures that all the various possibilities are taken into consideration and that the resources are used to their full potential. However, it also requires a number of factors such as: a) assimilation by the facilitator and students, b) a new approach- where users of the materials upgrade from Web 1.0 to Web 2.0 , c) the integration of web tools within a schematic framework, and d) the application of strategies that facilitate the achievement of student competences, i.e. with the application of each (web) tool.

Figure 4: OER Manager

Communication, which is the third component of this model, facilitates the relations within the social network. As a result, communication aids the development of more collaborative OERs. The proposed communication framework thus represents innovation in traditional communication, that is, the micro blogging tool is incorporated as an element that centralizes communication.

Micro blogging enables the creation of a social network among members of the course, a space where all users can communicate freely with each other. It therefore constitutes a key tool for information provision and coordination of the different activities that are being developed.

TECHNOLOGY

Technological platforms that support the Open –UTPL Model
• Open source tools: Moodle, Glesone, DSpace, eduCommons.
• Social web tools: Wiki, Blog, RSS, micro-blogging, You Tube, Slide share, and podcasts.
• Semantic Web Technology: UTPL Ontology, LOM Ontology, semantic search engines.
• Standard metadata: LOM.

The infrastructure that the Open-UTPL uses is called 'Moodle'. However, after certain adjustments this has now been renamed Glesone[7] . The reason for this change is because it integrates the concept of traditional Moodle with emerging ideas in Web 2.0 technology and social networks. Glesone provides two possibilities of interaction: the first one is free interaction without restrictions about the subject being discussed in the classroom (free social interaction) and the second model is based on an Open-UTPL model (guided social interaction). With the aim of raising awareness among members of the educational community of the appropriate usage of Web 2.0 tools, we will mainly work with the guided social interaction model-, at least in the early stages.

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[6] A efectos de este documento, se considera un usuario 1.0 a aquel que utiliza las herramientas web tradicionales y un usuario 2.0 es aquel que utiliza herramientas web 2.0.
[7] www.glesone.org

TOWARDS INSTITUTIONALIZATION AND THE SUSTAINABILITY OF OCW INITIATIVES

The accreditation of complementary subjects within the ECC curriculum (through OCW courses) constitutes a feasible initiative that can be adopted by all the schools at UTPL. In order for this practice to develop fully and for it to become properly integrated within the academic institution, a quality control process for OCW courses from partner institutions must also be established. In this way, it will be possible to manage the production cycle of the OERs that are designed by UTPL staff.

At present, UTPL provides higher education to over 25,000 students (in total) at both a national and international level. In fact, the University is a pioneer in Latin America for offering courses in the distance education modality. Those students who do not normally have access to onsite/traditional higher education may therefore take a professional degree program via the distance education system.

The UTPL distance education modality is comprised of a strong sustainability component a percentage of the tuition fees is assigned to the enhancement of bibliographical material and these courses are therefore considered useful for the production and promotion of OERs. Students who choose the accreditation system via the OCW initiative, however, are required to cover the fees for the approval of an OCW course and also administrative expenses. This guarantees that the OCW initiative can continue to be (financially) sustainable over the long-term.

ASSESSMENT OF THE IMPPACT OF THE UTPL-OCW INITIATIVE

As mentioned previously, this was initially a pilot project that was implemented at the UTPL School of Computer Science- the results of which are summarized in Figure5:
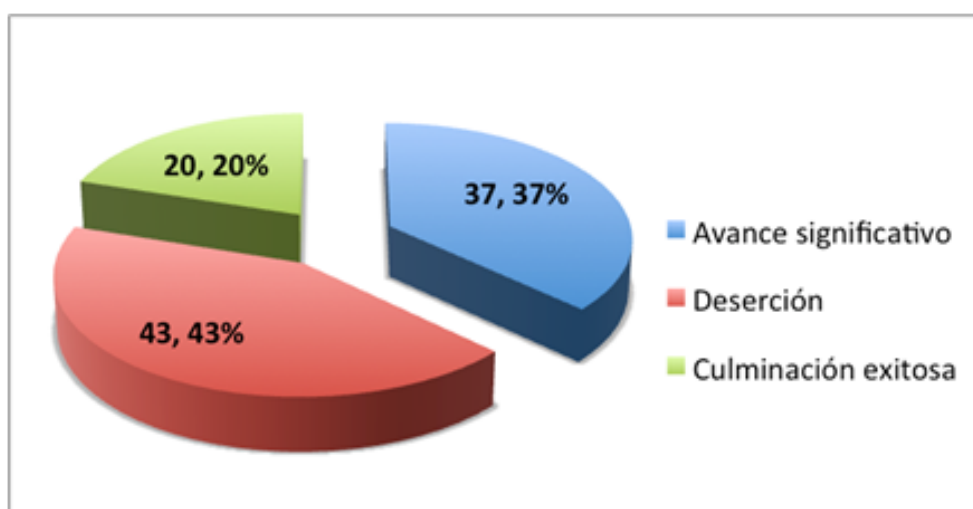
Figure 5: Pilot Plan Results

20% of enrolled students successfully completed the OCW courses, meaning, they completed the work agenda, including the competence-based assessment. 37%, however, made significant progress in doing the proposed activities. Finally, 43% had a poor participation due to the lack of student interest, i.e. they only enrolled in the courses and did not go to the tutorials. Our experts concluded that one of the reasons that led to poor participation was that there was a lack of initiative and an over-reliance on self-study skills. However, based on the results and the "know-how" obtained in this pilot plan, we will continue to work on making the necessary improvements in order to disseminate and implement the project in other schools at our university. The selection process of OCW courses is being updated not only does the quality of content need to be reconsidered, but it is also important to identify the new competences and the students' study skills before they enroll on an OCW course.

THE OPEN-UTPL MODEL

As a result of implementing the Open-UTPL model, 600 facilitators have been trained in practices related to the production, search, selection and usage of OERs. They have become specialized professionals as well as leaders in the knowledge society. This has been achieved by reinforcing the knowledge of our students. UTPL offers approximately 90% of its courses (from different undergraduate and postgraduate programs) via the Open-UTPL model.

The usage of OERs by the facilitators is, however, heterogeneous. On the one hand, there is wide acceptance and usage, but on the other hand, one can observe a certain level of resistance, which is reflected in the number and quality of OERs uploaded onto the system.

CONCLUSIONS AND FUTURE WORK

• In higher education systems, the usage of OCW content from other universities has the potential to complement and enrich education, i.e. from the perspectives of autonomy in virtual learning and internationalization.
• OCW content, however, is typically "information-based" and not "knowledge-based". For OCWs to be real instruments in supporting learning and transmitting knowledge, one of the key elements to consider is the adaptation of content through teaching plans and tutorial support by the OCW facilitators. With the pilot plan, for example, it was observed that there were better results in courses with tutorials.
• By analyzing the selection of educational material, it was determined that not all OCW initiatives have a similar structure. Our experience shows that these resources can be better taken advantage of if they contain the following elements: syllabi, self-evaluation activities, highly developed resources (such as multimedia material) and complimentary material (such as simulations, exercises, case studies, etc).
• The employment of study plans helped us to determine whether it is possible to use, reuse, and also to adapt contents to the specific needs of each institution or faculty.
• It was observed that the success of the implementation of this philosophy depends on the following factors: the appropriate selection of OCW courses (potential students should fulfill the prerequisites of each course and the institution should provide support in terms of infrastructure and tutorials). In addition, the students who take these courses should be motivated and open to flexible learning as well as being effective time-keepers.
• The promotion of open educational practices via the implementation of the Open-UTPL model in the educational/training process serves as a key strategy for academic innovation. In this way, it facilitates a social and collaborative culture and enhances the possibility of making knowledge more democratic.
• Although UTPL has 600 trained facilitators involved in the search, selection and usage of OERs, it is recommended to continue raising awareness and maximizing the potential of their skills in relation to OERs and PEA.
• From our experience it can be said that it is necessary to have an integral evaluation protocol for OERs, i.e., from the moment of design to their eventual usage, re-usage and impact in the community (end users).

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TEMOA: TECNOLÓGICO DE MONTERREY

MÉXICO

By: José Vladimir Burgos Aguilar, MTI, MSc, *Universidad TECVirtual del Sistema Tecnológico de Monterrey, México*
URL: www.temoa.info

INTRODUCTION

The website www.temoa.info provides a search tool for finding Open Educational Resources (OER), and is an initiative of The Tecnológico de Monterrey System. The word "temoa" means "search, research, investigate / inquire/ find out (indagar)" and its origin is linked to the Náhuatl language. Náhuatl is a lingua franca which acted as a communicative linguistic bridge among people that formed the diverse Mesoamerican cultures.

In order to meet the educational needs of Mexico and Latin America, as well as internationally, Temoa.info was sponsored and funded through an institutional model (Downes, 2007) and started its operations in March 2008. It has been maintained as a free access initiative for those who are looking for free public learning resources and materials. It provides a multi-language public catalogue (Spanish/ English) as well as a search engine which enables the user to discover selected resources. The search engine uses data descriptors (metadata) enriched by experts and librarians, along with other search mechanisms to help teachers and students find the best resources for fulfilling their educational needs (Ávila and Sanabria, 2008, p. 2; Burgos, 2008; Mortera, 2011).

Temoa.info offers a Web catalog with an intuitive search engine that uses information filters (facets) to facilitate the discoverability and exploration of Open Educational Resources (www.temoa.info/oer):
• Selected, described and evaluated by an academic community.
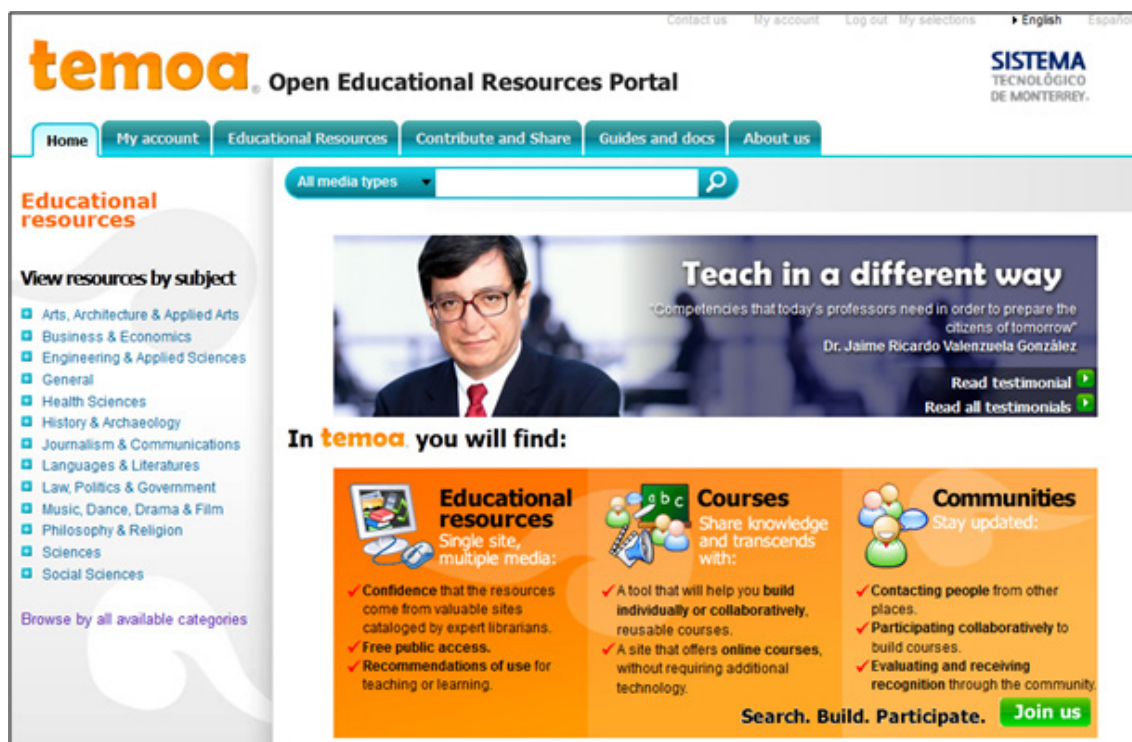• Categorized by areas of knowledge, educational level and language, among others.

Figure 1: Main page of Temoa.info

AUDIENCE

At the moment (June, 2012), Temoa.info portal offers more than 238,000 educative resources and complete courses selected from repositories, academic journals and universities which are highly recognized worldwide.

Resources can be found in various formats such as text, audio, video, multimedia and images, and from universities such as Harvard, Oxford, Stanford, MIT, Yale, Michigan, UOC, Exeter, Carlos III, and other international higher education institutions. Anybody with internet access can navigate and make use of the catalogue without any registration requirements.

In 2011, the TECVirtual University of the Technological System of Monterrey (www.tecvirtual.itesm.mx) enriched 156 higher education academic courses with OER materials including; 15 courses from the Education Graduates School (SGE), 42 courses from the Administration Graduates Program in (PGA), 7 from the Technology and Engineering Graduates Program, 83 professional courses through PACSI (System Campus Supporting Program) in the areas of Administration, Computing, Finances, Humanities, Engineering and Marketing. 9 courses of secondary education level also had OER materials added through PACSI.

> Temoa.info offers more than 238,000 OER in several formats: Text (181,787); Image (19,539); Video (4,225); Audio (1,265); Software and multimedia (614).
>
> More than 1,040 information sources audited by librarian experts: 715 in English and 325 in Spanish.
> **June, 2012

The Universidad TecMilenio of the Monterrey Technological System (www.tecmilenio.edu.mx) enriched 122 academic courses with the use of open educational resources (OER) from TEMOA´s catalogue, including: 12 at post-graduate level, 98 at bachelor level and 12 at secondary education level.

The use of OER in the Tecnológico de Monterey System supports the international academic community by taking into account the following audiences in the following ways:

Students interested in accessing complementary information to aid understanding of concepts and to help enrich their tasks and projects. (enabling better and different ways to learn).
• Encouraging the use of OER catalogue for research and school activities.
• Providing mechanisms of socialization in the educational students' community.
• Providing simple and practical tools to facilitate the incorporation/ adoption of OER in school activities.

Teachers interested in the enrichment of their lectures, and in contributing as experts to the system (improving their educational practice and teaching in a different way).
• Providing a significant OER collection allowing the professor to enrich their classes (in all different areas of knowledge)
• Providing knowledge construction tools (subjects, courses and activities) to facilitate academic collaboration
• Providing communication and socialization tools to raise the creation of education collaboration and investigation networks.

Academic and research networks (support to close the educational gaps)
• Supporting the creation and integration of academic networks of collaboration with other higher education institutions (HEI) around the world.
• Sharing of experiences to enable collaboration between HEI.

Temoa.info is institutionally covered through the Tecnológico de Monterrey System (http://sistematec.mx) and it is linked to the following institutional sites: Tecnológico de Monterrey Libraries Network (http://biblioteca.itesm.mx), Tecnológico de Monterrey Academic Site (http://academia.itesm.mx) , and Tecnológico de Monterrey Students Site (http://mitec.itesm.mx)

METADATA

In Temoa.info are documented catalographic information files referring to resources in different areas of knowledge (in line with the scheme of "Interface and Hierarchic Classification LC", HILCC (Davis, 2006; HILCC, 2008) of the University of Columbia) and published in several delivery formats and in different types of learning resources. In figure 2, it is possible to see the results of an information search through the hierarchic classification of knowledge applied in the catalogue, after OER have been classified and identified under the HILCC scheme.

Each catalographic index card is composed of a collection of data descriptors, also called "metadata," that represent a digital object of information through an index or on the basis of electronic data. A group of metadata can include descriptive information about context, quality, conditions or specific characteristics of data, and are used more extensively in databases and indexes to facilitate more refined queries in search engines, in order to optimize the process and to avoid complementary manual filtrations by end users. Metadata on the catalogue can be mapped with metadata standards recognized internationally as Dublin Core (DCMI, 2010) and LOM (Learning Object Metadata) (IEEE, 2002), where internal tables are created in the system to interpret and map the data; currently mapping is done manually by librarian experts (crosswalk metadata).

> Temoa.info offers metadata to facilitate Mobile Learning on mobile tools such as smartphones and tablets
>
> It is possible to download the Temoa application for free directly from the Android shop and iTunes (www.temoa.info/es/descargas)

Temoa.info operates under strict quality control processes with the supervision of a librarian's team (www.temoa.info/es/politica-coleccion). An initial process called "Lifecycle of an Open Educative Resource" integrates four subprocesses which enable confirmation of the reliability of an OER's source, as well as enabling the application of evaluation criteria to assess the OER fulfillment. The resources are labeled with a status and this information is presented on each descriptive card, documenting its reference (see figure 3): suggested, audited, and catalogued. Each OER available in the catalogue is also qualified by site users through evaluation criteria which enriches the value of using this resource (www.temoa.info/rubric).

An electronic resource will be accepted into the catalogue only if the source of origin respects copyrights and meets the OER criteria (www.temoa.info/oer-criteria). Typically, educational resources are not found isolated or independently on the Internet, but are available on websites, and in institutional or thematic repositories which act as "providers" of data and information, also identified as "OER Providers". It is not until the OER Provider has been audited by a librarian expert that published resources can be considered for indexing in the catalogue under the initial status as "suggested" resources.

Figure 2: Information search results

(Hierarchical classification of knowledge)

Figure 3: Catalographic index card of an OER in "temoa" website

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CEDERJ – TECA
RIO DE JANEIRO, BRAZIL

By: Dr Sandra R. H. Mariano, Dr Celso Costa, Valéria T. Castro and Rafael Cuba Mancebo, *Universidade Federal Fluminense, Brasil*
Collaborator: Masako Oya Masuda, *Vice Chairman and Academic Director of Fundação Cecierj - Consórcio Cederj, Brasil*
URL*:*
http://teca.cecierj.edu.br
http://www.cederj.edu.br

INTRODUCTION

In 1999, the six public universities in the state of Rio de Janeiro, UFRJ, UFF, UNIRIO, UFRRJ, UERJ and UENF, gathered in a consortium funded by the state government of Rio de Janeiro with the aim of providing free higher education in distance mode for students in the state of Rio de Janeiro, based on the skills developed by the institutions in undergraduate courses. This was renamed the Center for Distance Higher Education of the State of Rio de Janeiro or CEDERJ and initially focused on offering undergraduate courses for teachers training for primary and secondary school.

Figure 1: Main page of Centro de Educação Superior a Distância do Estado do Rio de Janeiro (Cederj)/Fundação Cecierj

In 2002 the Government of the State of Rio de Janeiro, as part of its mission to extend and internalize free higher and quality education in the State, oversaw the creation of the Science Center Foundation and Distance Higher Education for the State of Rio de Janeiro (CECIERJ Foundation) in order to: a) provide free higher and quality distance education for the entire community of the State of Rio de Janeiro; b) carry out scientific publication for the whole society of the State, and c) promote the continuing education of teachers in elementary, middle and high schools.

Teachers of courses offered by the CEDERJ come from consortium universities and are the authors of supporting course materials. Their contribution to this political-pedagogical project is approved by the internal academic

boards of their respective institutions, ensuring academic competition among the best courses from the six universities. The universities coordinate the implementation of these courses and issue diplomas of completion. The CEDERJ consortium understands distance education to be composed of four main elements which are: the exclusive teaching materials (printed, audiovisual and media appropriate to the students to be trained); the mentoring system, (classroom and distance); physical sites with full academic structure; and the virtual learning environment. These elements are part of the teaching and learning process and provide access to education for those who are excluded from the mainstream education process because they live far from large centers or due to time constraints.

The courses offered are conducted every six months and the student admissions process is carried out by the CEDERJ, with selection tests developed by the partner universities.

The face-to-face tutorials take place at sites all over the state of Rio de Janeiro. In 2012 there were 34 sites for training teachers throughout the state of Rio de Janeiro, with 26,000 students enrolled in 10 graduate programs, with an emphasis on degrees in Mathematics, Literature, Physics, Science, and History. At these sites students tackle obligatory activities such as assessment, classroom laboratories, face-to-face tutorials, etc.

Partner universities of the CEDERJ consortium are funded through grants for education for their teachers to develop teaching materials for each discipline of the course. This content is sent to CEDERJ, whose professionals develop the instructional design of each lesson prepared by the teacher before making them available to students and printed in PDF format.

THE CEDERJ INITIATIVE TO SHARE OPEN EDUCATIONAL RESOURCES

The exchange of information and scientific dissemination is part of the concept and principles of the CEDERJ, which over time has accumulated a big reserve of multimedia learning objects, printed didactic materials in the form of classes, as well as videos and other education resources, whose authors were paid for their work.

Understanding the importance of sharing the educational collection, CEDERJ created in 2010 the Open Educational Resources (OER) portal, entitled Teca, (teca is a Greek suffix meaning "place where is kept"[1], still widely used in Portuguese names, such as library, art gallery, etc.).

The collection consists of materials produced by the CEDERJ and partner universities, but documents are also accepted from others who are interested in publishing their work in this environment.

The Consortium had to agree to authorize making the content produced by their teachers available on Teca before the CEDERJ was able to share the resources. There was a unanimous decision for all content to be made available in full, while restricting the possibility of reuse or plagiarism. The direction of CEDERJ chose to license materials using the more restrictive Creative Commons license, considering that the availability of content is, in itself, a significant development and that this license was what came closest to the protections offered by the law of copyright in force. In Brazil, the culture of sharing content is in its early stages, so the CEDERJ initiative intends to foster progress by contributing to the spread of the OER concept among teachers in the consortium universities.

CEDERJ takes responsibility for maintaining and updating the information and materials contained in the repository, but the institution is not responsible for any inaccuracies in the material contained in the database.

Initially the entire collection produced under CEDERJ was published in Teca. Until July 2012 around 8239 files were available in the Teca environment for use by the general public, including images, video, audio and text.

The Teca portal was publicly funded by FAPERJ (Carlos Chaga Son Foundation of research support of the State of Rio de Janeiro) and was supported by the Ministry of Education, the Secretary of Science and Technology and the Santa Cabrini Foundation .

Teca 's intended audience is students in higher education, however statistics show that it is teachers who use it most. The portal uses Google Analytics to generate access reports, identifying the regions of access, the amount of access and from which site the applicant was directed to the Java library.

Figure 2: Main page of Teca

In order to access the free content on Teca, users must register with simple information such as basic personal data, email and the user's main reason for accessing the site.

Teca is not responsible for any false or inaccurate personal data entered by users, and the user guarantees the correctness and accuracy of data supplied to the database. Teca is updated daily and all media in the database can be downloaded for free, as long as they are not used for commercial purposes.

CEDERJ signed a co-operation agreement with the Open University of Brazil through CAPES, to make all their content available to all Brazilian public universities and education federal institutes, ensuring the formation of a large database with educational content available for the UAB. This exchange became a priority for the CEDERJ.

Figure 3: Information of a document cataloging at Teca's portal

Subsequently there arose the need for greater investment to improve query tools for the general public and to improve the exchange of data on the use of keywords to locate relevant content. Documents are located by cataloguing at source, which allows the recording of six words that will be used to identify the document. This prevents the researcher from finding content if they search for even slightly different words. The use of a metasearch engine would allow users to find specific terms in the body text, and also allow the use of more than one word in the search.

Figure 4: Results of searching for information, including images, video, audio and text

THE PROSPECT OF REUSE BY THE TEACHER

Once the college professor knows about the Teca portal, they have access to a large collection of lessons prepared by teachers at Brazilian public universities that have a good reputation.
The accessibility of quality material for free through the library prevents students from illegally copying books, but the restrictive nature of the Creative Commons license also limits the possibilities for reuse, as it only allows the teacher to enrich their classes by reproducing the archival material, but does not allow for renovating or adding value to the content of these open educational resources.

The work done by the CEDERJ through Teca is inspiring, as it is done in a country where university teachers find it difficult to publish their material. The site could therefore be of great importance in promoting the use of more open licenses to allow Brazil to be a pioneer in an area that is still gaining strength in other countries, to embody the next step in education practices and to allow more open access to, and capacity for the renewal of, knowledge.

It is possible for a professor who runs a class about Sociology for a course in Administration, for example, to find among the files a set of class notes that he deems as high quality and that can be used by him as a reference for his discipline. This represents a major advance in Brazil because it solves two problems: the first is to prevent the illegal reproduction of textbooks by students, replacing it with a high-level material which can be reproduced freely, without violating any law. The second possibility is the formation of a network of teachers interested in the same subject. This can enable the sharing of content and allow professors to seek authorization from colleagues to add to materials, creating new ones, incorporating improvements to the text and adapting it for a different context. This allows the practical reuse of content and contributes to the creation of a culture of sharing and collaboration, which in the longer term should encourage increasingly open licenses.

There are some technical issues with content reuse; because files are saved in the PDF format, the teacher must have a program for converting PDF files to another editable format if they are to rewrite or add content .

INSTITUCIONAL POLICY OF OPEN ACCESS UNIVERSITAT OBERTA DE CATALUNYA

SPAIN

By: Dr Marcelo Maina and Dr Maria Pérez-Mateo, *Universitat Oberta de Catalunya, España*
Collaborators: Dr Albert Sangrà, Dr Lourdes Guàrdia, Dr Montse Guitert and Dr. Marc Romero, *Universitat Oberta de Catalunya, España*
URL:
http://openaccess.uoc.edu/

INTRODUCTION TO THE INITIATIVE

The Open Educational Resources movement supports the trend towards the open access of teaching materials and scientific results generated within academic institutions. It encourages materials to have permanent access, and to be free of charge and free of restrictions. The OER initiatives also promote a culture of sharing and exchange between all the teaching and learning agents.

Higher Education institutions are developing and implementing different policies in order to facilitate access to their own teaching and learning productions and research. In this case, we present the Universitat Oberta de Catalunya (UOC) policy, which encourages teaching, research and managing staff to publish their work within the institutional Repository (O2).

> The distinctive aspects of the Open Access Policy from UOC are the involvement of all the University communities (research, teaching and management staff) and the inclusion of different documentary typologies generated within the University.

BASIS OF INSTITUTIONAL OPEN ACCESS POLICIES OF THE UOC

Adopting the tendency of the open movement, on the 7th of October in 2010, the UOC approved an Open Access Policy (also called Institutional Mandate): an institutional order which supports open access to the scientific productions of the institution.

The institutional policy of open access is based on the requirement to deposit all publications of the academic and researchers' community since the date of the institutional Mandate into the institutional repository (O2 repository), respecting the contract terms signed by the authors with publishers.

Scientific and teaching productions of the UOC therefore became accessible in a free, open, permanent and organized way. With this policy implementation UOC promotes its visibility and the impact of its scientific research.

The institutional Open Access Policy is addressed to the different UOC communities under the following conditions:

• Members of the research community: They are encouraged to deposit their research publications (journal articles, texts presented at congresses, scientific- technical documents, books or chapters from books, searching reports, etc.) developed under the UOC frame activity in the institutional repository.

• Members of the academic community: They are required to share their academic publications (teaching materials or didactic modules) developed within the framework of their UOC teaching activity in the O2

repository. The OCW of the institution (http://ocw.uoc.edu), in turn feeds back on the institutional repository. Open access to all learning materials for students or teachers (PEC, exams, exercises, etc.) is also promoted.

Figure1: OCW UOC

It is worth mentioning that a significant volume of the teaching materials and didactic modules used for teaching activities are produced within the institution by university experts and /or collaborators, using a significant amount of economic resources. The Open Access Policy assigns a CC license (BY-NC-ND) by default to all authoring contracts made since 2010, which allows the UOC to use the work in an open way (for the benefit of the general public), giving credit to the author, but also restricting the resources to use for non-commercial purposes and non-derivative work. Other licenses are also considered such as CC (BY-SA), GNU GFDL and GNU GPL.

• Doctoral students: Recipients of a UOC doctoral fellowship are required to deposit an electronic copy of their doctoral thesis in the institutional repository.

• Students: they may deposit their work experiences, masters theses and/or final dissertations in the institutional repository for the purposes of free consultation, educational use, and general dissemination.

The requirements of the UOC Institutional Mandate are based on the recommendations of the European University Association Council and those from the Berlin Declaration, signed by the University on the 2nd of June 2006. With the establishment of this mandate, the UOC also follows resolutions adopted by the Promoter Subcommitee of Measures favoring Open Access from the CIC (Interuniversity Council of Catalonia , http://www.gencat.cat/economia/ur/cic/).

O2: "LA ABIERTA, EN ABIERTO"

O2, la Oberta (the Open, in catalan), is the name of the institutional repository of the UOC.

Figure 2. O2, institutional open repository of the UOC

Its objectives are:

• To disseminate open digital documents produced by members of the UOC as part of their research, teaching and management activities and to increase its visibility and impact in Catalan, Spanish and the international sphere.

• To preserve digital documentation generated by the UOC and guarantee their future accessibility.

• To enhance open access to the scientific information by facilitating self-archiving (by the authors[1]) of publications and also by promoting the deposition of open educational resources (OER).

> O2 includes journal articles, preliminary editions (preprints), conference papers , communications at congresses, research reports, working papers, teaching materials, final degree projects, dissertations, proceedings of UOC, inaugural lectures, etc.

It facilitates the exploration of content by communities (teaching, institution and research) by enabling the search of various categories such as: collections, authors, titles, publication dates and subjects. It allows advanced searches, subscriptions, access to information about citations and impact, usage statistics regarding consultations and document downloads, the sharing of documents via e-mail or social networking sites, exports to content management (Refworks) and full text searching. Most of these services are only available for users who are logged on at UOC Virtual Campus.

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[1] Authors themselves are responsible for authorship and that would infringe the rights to use the documents.

O2 is a project coordinated by the Virtual Library of UOC. It uses the free software DSpace, developed by the Massachussets Institute of Technology (MIT) and Hewlett Packard (HP). Included links are permanently available.

O2 IN NUMBERS

September, 2012:
• Contains 3825 documents.
• Received 434533 visitors.
• There have been 588521 downloads.

OPEN PRACTICES

Institutional repositories are part of the paradigm shift which represents the Open Access[2] movement in scientific communication: allowing free access to scientific, technical and academic literature and increasing the impact and visibility of the work of researchers and academic and scientific institutions.

The trend towards Open Access is gaining ground in education and specifically in the context of Higher Education, there is a need to formalize policies focused on establishing a regulatory framework that will help in the development of content sharing. It is important that these policies are clear and transparent, both internally and externally to the institution, and agreed upon as much as possible.

Institutional policies such as the one discussed here promote the opening of access to knowledge produced, within the institutional frame. The advanced functionality and flexibility of the institutional repository and the simple O2 OCW access are not only ways to organize the production of the University, but also a way of promoting the Institution's visibility and impact with a view to international cooperation.

Adoption of open access policies also encourages the adoption of open pedagogical approaches associated with the Open Educative Practices movement (OEP). OEP is a set of practices to enable the creation, use and management of Open Educational Resources with the intention of improving quality and innovation in education (project OPAL, 2011). Indeed, the publication of open content not only facilitates access to quality educational teaching resources freely and openly, but also promotes its use and reuse for educational purposes in line with CONCEDE and RAA projects. This has implications for the design of pedagogical approaches, evolving from content acquisition to the generation of transformative and innovative practices.

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[2] Regulated by statements as Budapest Open Access Initiative, 2001; Bethesda Statement on Open Access Publishing, 2003; and Berlin Declaration, 2003.

For further information

• Berlin declaration on Open Access to Scientific Knowledge (2003): http://oa.mpg.de/lang/en-uk/berlin-prozess/berliner-erklarung/

• Bethesda Statement on Open Access Publishing (2003): http://www.earlham.edu/~peters/fos/bethesda.htm

• Budapest Open Access Initiative: http://www.soros.org/openaccess

• DSpace (software libre): http://www.dspace.org/

• Guía para Prácticas Educativas Abiertas en las Organizaciones (Proyecto OPAL): http://www.oer-quality.org/wp-content/uploads/2011/03/OPAL-OEP-guidelines.pdf

• Licencias Creative Commons: http://creativecommons.org/licenses/

• OCW de la UOC: http://ocw.uoc.edu

• Política institucional de acceso abierto de la Universitat Oberta de Catalunya: español e inglés.

• Proyecto Content Creation Excellence through dialogue in Education (CONCEDE): http://www.concede.cc/

• Proyecto Modelo de autoría de Recursos de Aprendizaje Abiertos for Versioning (RAA): http://www.innovauoc.org/showcase/?content=load_proyecto&id=104

• Recomendaciones de la Asociación Universitaria Europea (EUA) en Acceso Abierto: http://openaccess.eprints.org/index.php?/archives/385-guid.html

• Sobre el Repositorio de acceso abierto de la UOC (O2): http://openaccess.uoc.edu/webapps/o2/help/index_es.html#about

OPENSPIRES: OER PODCASTING AT OXFORD UNIVERSITY
UNITED KINGDOM

By: Daniel Villar-Onrubia and Dr Cristóbal Cobo, *Oxford Internet Institute*, *University of Oxford, UK*
Collaborator: Melissa Highton, *Oxford University Computing Services, UK*
URL:
http://podcasts.ox.ac.uk/open
http://openspires.oucs.ox.ac.uk
http://blogs.oucs.ox.ac.uk/openspires/
http://www.oucs.ox.ac.uk/podcasts/

INTRODUCTION TO THE CASE

OpenSpires is the name of Oxford University's collection of OER podcasts and it was also the title of a project running from May 2009 to April 2010 with a double purpose: "to increase the amount of audio and video content released from Oxford as Open Content Resources (OER) [and] to enable the University to investigate and disseminate the institutional implications of making some of this material available as Open Content" (Oxford University Computing Services 2010a). This project was part of UKOER,[1] a HEFCE-funded programme led by JISC and HEA.

The project was led by the Learning Technologies Group of the Oxford University Computing Services (OUCS) and built upon the podcasting activity already in place at the University since 2008, when the University both joined iTunes U[2] and launched an in-house webcast portal.[3]

The materials released via iTunes U cannot be distributed by anyone except Apple and the University and are exclusively for personal use by individual downloaders. To facilitate the creation of reusable learning and teaching resources that can be used in the classroom we need to give more rights to end users than the current iTunes U distribution model does. (Oxford University Computing Services 2010b)

In order to provide audiences with such rights, the OpenSpires project encouraged contributors to license their works under a Creative Commons (CC) license. The role of the University's Legal Services team was key in this sense, as their assistance was crucial for the development of a simple and unified form "that takes licenses from contributors that are broad enough to enable both iTunesU and OpenSpires release" (Mansell, Wilson, Highton, and Robinson 2010a).

Given that the resulting collection of OER was conceived as a subset within both the Podcasts Portal and iTunes, it was extremely important to provide straightforward ways for users to reach open content. Apart from enabling queries restricted to OER materials through the Podcast Portal and creating a featured collection for open content at iTunes U,[4] the podcasting workflow was also adjusted to require the display of CC markers on content itself and on contextual information (e.g. cover images).

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[1] http://www.jisc.ac.uk/oer
[2] http://itunes.ox.ac.uk
[3] http://podcasts.ox.ac.uk
[4] http://itunes.apple.com/WebObjects/DZR.woa/wa/viewTagged?id=381699182&tag=Creative+Commons

Figure 1: Screenshot of the Oxford University's Podcasts Portal

In addition to a substantial stock of OER podcasts generated over the course of the OpenSpires project, its main legacy consisted of "a sustainable set of policies and workflows that would allow departments from across the University of Oxford to regularly publish high quality open content material for global reuse" (Mansell, Wilson, Highton, and Robinson 2010b, 4).

ENGAGING CONTRIBUTORS AND FOSTERING OER LITERACY

To develop a community of faculty members as potential OER creators, the OpenSpires project initially focused on engaging scholars who had already been somehow involved in the creation of podcasts. The recruitment of potential contributors was pursued in a number of ways – e.g. by means of a direct invitation sent to some 300 podcasters via email or involving stakeholders within departments in the circulation of information on the project. In addition, several meetings, focus groups and training sessions, along with a survey, were run with the aim of getting in touch with potential contributors and gaining insight into how to best foster engagement, trying to understand motivational factors and common concerns such as intellectual property issues. The number of faculty involved grew steadily. By 2012 1,700 individual speakers had signed CC licenses for releasing parts of their materials.

Actions aimed at raising awareness of OER and facilitating the development of relevant competences were paramount to the OpenSpires project. Those goals were pursued by means of a set of guidance materials and a series of sessions and courses offered to academics and staff members throughout the project. A specific section on the OpenSpires project's website gathered all the resources created throughout the project, starting with an introductory guide to the topic called OER Basics. This section was subsequently expanded with numerous slides, posters, leaflets, videos and eventually the final report. [5]

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[5] http://openspires.oucs.ox.ac.uk/resources/index.html

Courses and training sessions not only covered the basic technical skills required to record, edit and distribute podcasts, but also focused on key legal aspects and other relevant competences, such as how to find and re-purpose open content produced by others. The range of training and informative session offered by the OUCS was comprehensive, as shown by the number of activities and diversity of topics: Introduction to podcasting for education; Screen and audio capture for teaching; Podcasting at Oxford FAQs; The secrets of presenting to camera; Introduction to Final Cut Pro 7; Copyright for print, broadcast and multimedia; and Creative Commons, copyright & education (Mansell, Wilson, Highton, and Robinson 2010c; Mansell, Wilson, Highton, and Robinson 2010d). It is worth mentioning that after the end of the OpenSpires project most of those courses have remained as an embedded part of the programme of events offered at OUCS on a regular basis. [6]

EMBEDDING THE PROVISION OF OER WITHIN PRE-EXISTING ORGANISATIONAL PROCESSES AND SCHOLARLY PRACTICES

The OpenSpires project was particularly concerned with the development of a sustainable approach to OER provision, trying to ensure the continuity of such practices beyond the timescale of the project. The main strategy in this respect entailed embedding:

> … the release of OER as part of regular podcasting activities, by raising awareness of the open content movement (increasing 'open content literacy'), standardising institutional processes (e.g. minimising and simplifying legal paperwork), providing technical and legal support when required and also training staff within departments to become self-sufficient in podcasting activities. (Mansell, Wilson, Highton, and Robinson 2010b, 9)

The OpenSpires project team decided to focus their OER work on existing technologies and workflows in place at Oxford University since the launch of its iTunes U channel and Podcast Portal (for further details see Robinson et al. 2010), though some adjustments were required in order to introduce the Creative Commons licensing. They chose to focus on 'born digital' materials where the identity of the content creator was clear.
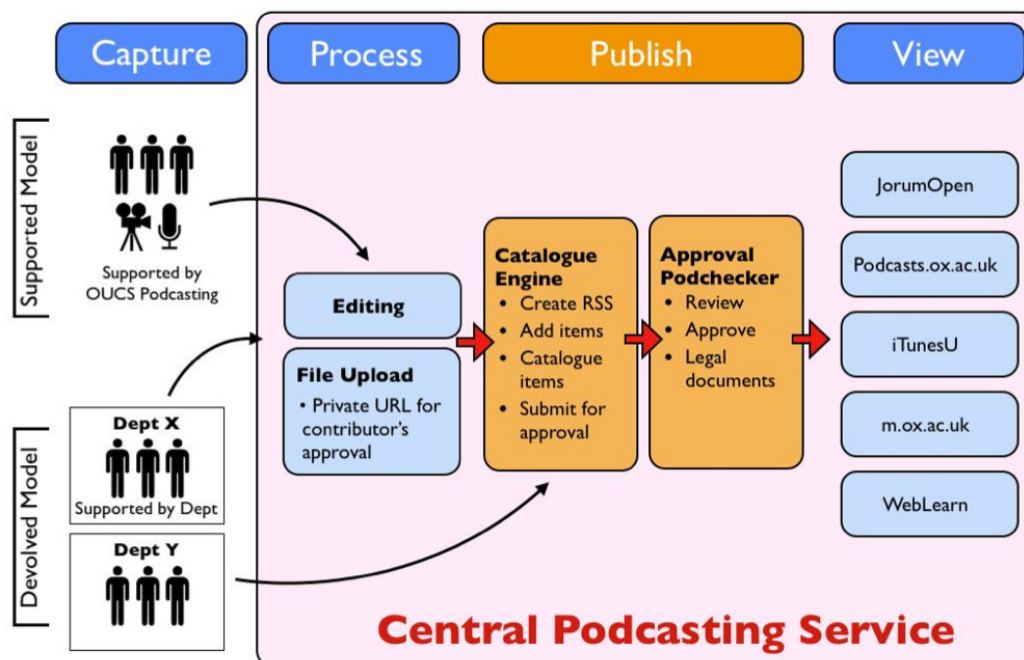

Figure 2: OpenSpires content workflow showing the two models of content generation
Graph originally published in Mansell, Wilson, Highton, and Robinson 2010b, 8.

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[6] http://www.oucs.ox.ac.uk/itlp/courses/

Aiming to ensure a reasonable number of contributions, two alternative routes for the acquisition of content were deployed over the course of the project. The so-called "fully supported model" involved the participation of the OUCS podcasting team, assisting contributors in the process of recording and/or editing content. Conversely, the "devolved model" relied on a distributed system of support where departments operate as the main providers of assistance. Likewise, the devolved model also allows contributors to release content themselves, if no support is needed (Mansell, Wilson, Highton, and Robinson 2010b).

Some departments (e.g. James Martin 21st Century School, Continuing Education, Politics and International Relations) had already adopted the devolved model as part of their podcasting activity, usually relying on the work of an in-house team of support staff that included webmasters, communications officers, etc. The OpenSpires project attempted to empower as many departments as possible to adopt the devolved model, with the aim of favouring the sustainability of podcasts provision in the long-run, beyond the end of the project. To do so resources were allocated for the provision of training aimed at building capacity among staff members at departments.

The requests for assistance via the fully-supported model were substantially higher than anticipated by the project, to the extent that some budgetary adjustments were required in order to enable the recruitment of "short-term temporary staff to assist with audio and video recording and editing" (Mansell, Wilson, Highton, and Robinson 2010b, 9). As initially planned, the fully supported model was discontinued at the end of the OpenSpires project, so contributors are now expected to produce their own content or request support via the devolved model, if available at their departments.

The success of the project was due to the adoption of a devolved model of content production providing a clear workflow process for department support staff to follow which minimised academic support time. (Highton and Robinson 2010, 5)

The supply of audio transcriptions is another service that was exceptionally provided just over the course of the project, with the aim of improving the discoverability of podcasts by means of detailed metadata. Since human transcriptions do not seem to be sustainable, due to high cost, a new project called SPINDLE is currently exploring the opportunities of speech-recognition technologies for generating keywords.[7] The Creative Commons licensing allows for the creation of translations and transcripts of materials by users and the Oxford team continue to explore opportunities to make materials available in other languages.

Around 50% of the materials within Oxford's podcasts collection are licensed under Creative Commons (Highton, 2012. pers. comm). The impact of Oxford University's podcasting activity has been systematically monitored by the OUCS, revealing that the number of visitors have increased steadily since its inception (see Geng, Marshall, and Wilson 2011). Oxford University has seen more that 18 million downloads of their materials by learners in more than 100 countries, and the subject of the content seems to be more important than the license in terms of popularity (Highton, 2012. pers. comm).

LEARNED LESSONS AND TRANSFERABILITY

The strategies deployed at Oxford University for promoting the release of podcasts as OER have proven to be highly amenable to sustainability, scalability and growth at Oxford and offer exciting models for transferability to other HE institutions. Indeed, the project Ripple (Mansell 2011) was specifically devised to help two other universities in the development of their own OER initiatives, drawing on the expertise gained by the OUCS after OpenSpires and other relevant projects in the field of open education.

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[7] http://blogs.oucs.ox.ac.uk/openspires/category/spindle/

Some of the conclusions and recommendations of the OpenSpires project might be particularly valuable to any HE institution wishing to embark on the field of open educational practices are listed below:

- Audio material is cost-effective and an easy starting point for institutional OER. The OpenSpires team recorded video because of the perceived quality benefits for education, our findings suggest that users prefer audio for downloads (our experience with iTunesU suggest a ratio of three or four to one in favour of audio).
- To aid content acquisition and generation there must be proactive client relations 'agents' in place with each department.
- The public good is incentive enough for content contributors particularly if they see benefits for the future students of their subject and there is a great goodwill for this work from academics providing it has minimal impact on their time.
- Similar activities by peers fosters activity (seeing other people 'like us' also doing it).
- OER / Creative Commons are not yet widely understood terms so outreach to internal stakeholders through training sessions is essential to building open content literacy. RSS is fit for purpose for providing syndication of sets of open audio, video and related documents.
- Web 2.0 (iTunesU/YouTube etc) offer a global audience which leads to high visibility of the content and potentially the very highest possible downloads. High downloads means more reuse and feedback from users. Feedback from users provides the best possible motivation for academics to participate.
- Success comes more easily if the activity is aligned to institutional strategic priorities.
- The demand on content production resources should not be underestimated, e.g. the unexpected time/cost implications in proofing descriptions, names of contributors etc., the time to obtain sign off/approval by contributors, and other quality assurance.

(Mansell, Wilson, Highton, and Robinson 2010b, 22–23)

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Interviews

David Kernohan
18-06-2012

By: Dr Cristóbal Cobo, *Oxford Internet Institute, University of Oxford, UK*
Podcast:
http://www.youtube.com/watch?v=EtkxlKUaRXc

[Note: The opinions expressed here are those of the interviewee and interviewer.]

David Kernohan, Programme Manager, e-Learning. He is responsible for the JISC/Academy OER programme, and other work around the domain of learning resources and activities.

David Kernohan worked previously as a programme manager and policy officer at Higher Education Funding Council for England (HEFCE). Then he got involved in teaching quality enhancements and he also was involved in TQE at HEFCE. Since 2006 he has been employed by JISC to run initiatives.

He has been part of the team that works across JISC and the Higher Education Academy to manage the HEFCE, some of the activities that he collaborates are: funding OER programmes, which includes allocating funding projects; monitoring projects: running events; preparing different publications, as well as facilitating the communication with journalist, managers or researchers and other individuals interested in OER.

David shared in more detail his views about the ongoing work developed by UKOER in the following link: http://followersoftheapocalyp.se/what-i-talk-about-when-i-talk-about-ukoer/.

In his text David describes that the unique nature of OER in the UK can be explained based on the following components:
• Low initial and ongoing cost practice
• Empowering individual academics to create and release materials, within (and outside of) institutional policies and practice.
• A nuanced understanding of the issues around reuse.
• A genuine feeling of community action and community support, supported by an inclusive and wide rationale.
• Drawing on existing strengths and structures, most notably the existing national services and ongoing work around the more library-esque facets of digital resource management.
• A spirit of technical and structural experimentation.

As the diagram illustrates UKOER has moved from basic assumptions such as understanding OER as a beneficial initiative, and now the focus is on how it is being adopted, as well as monitoring and identifying the benefits that it can generate in specific contexts. In other words, the project has evolved to have a more specific and more targeted focus.

He adds that some of the distinctive elements of JISC are: the constant focus on sustainability; the use of comparatively low levels of funding; as well as the idea of looking across sectors rather than individuals institutions. He explains that some of these actions were established after a number of conversations with members of the Open Courseware MIT as well as the Open Courseware Consortium initiatives. Instead of taking these approaches, the strategy was to analyze critically these initiatives (i.e. funding, organization, etc.) and then adapt them into the UK context. During this analysis, he explained, it was estimated that a centralized institutional unit would be probably less sustainable in terms of OER practices. Instead, it was opted for empowering academics to release their own materials.

JISC supports universities in different ways. The first one is directly via project funding which enable institutions to take risks, helping them to try new ideas or initiatives. Second, providing support, advice and guidance to universities (i.e. OER InfoKit, evaluations, OER IPR Support).

Regarding the funding of OER initiatives, UKOER only contributes to a portion of the total investment. Because UKOER only provides limited and short term funding, it always encourages institutions to include contributions from their own organizations and partners. "During our work we insist on the importance of sustainability of these kinds of projects, which is something that needs to be addressed right at the start of the

project", he adds. "The most common ways of making OER projects sustainable is when it becomes relevant for a group of academics, whereas in many cases they keep working on it because they consider it worthwhile and part of their academic practice. Another alternative is at the institutional level, when OER projects get support from senior management. This is considered a supplementary way to get the needed funding to make these initiatives sustainable. The primary cost in OER is usually the salaries (time of professionals, academics, developers, etc.).

The current UKOER project as it is now will probably not be offered in the future as such. UKOER is starting to see the approach to OER through a toolkit where the work will meet particular needs. Instead of giving projects to people, it is more likely that we will run initiatives that contribute to universities' outreach online, as well as collaborate in the process in which universities manage their OER contents. We see ourselves supporting new initiatives which are already using the OER approach.

The current level of OER adoption within the UK varies significantly. There are institutions where OER is becoming the mainstream practice. Our recent research indicated about 70% of all English HE universities at least express an interest in OER and more than 50% have released OER. A good illustration of that are the more than 50,000 OER items released in JORUM, one of the main national repositories [http://www.jorum.ac.uk]. In other English universities OER is still not mainstream but at least it is something that needs no explanation. More and more people know about it, even if they are not involved with these kind of initiatives."

David adds that one of the strengths of OER is the existence of a range of drivers and benefits that support this initiative. OER have different meanings for different groups. A manager can identify marketing and reputational benefits useful for recruitment or raising an institutional profile nationally and internationally. On the other hand, academics see OER as an opportunity to raise their professional profile and as a new avenue for peer recognition, and at the same time, others understand that sharing their knowledge with the world can be considered a humanitarian act.

Regarding possible strategies to promote OER engagement it depends particularly on reasons for a personal and institutional attraction to the idea. For instance, academics need to be interested (i.e. when they see benefits in their professional position or employment status). On the other side, the support of senior management is also considered a strategic element. "It is fair to say," David says, "that the OER funding can also easily become an incentive as well. Having said that, in JISC we attempt to do both, using a bottom-up approach talking with interested academics but also using top-down initiatives. We talk with senior managerial level, but at the same time we try to organize press releases among other initiatives. Based on our experience the size of the educational institution does not make a significant difference for adopting OER initiatives or not."

Regarding the obstacles to adopting OER, it will depend on individual priorities. To adopt OER initiatives is something that academics and institutions need to decide to do. We are facing time of important changes in a very short period, such as: now models of funding, evaluations, changes in tenures, etc. In this context, there is a risk that OER initiatives can be 'lost' within these processes of changes. From this perspective, OER can help institutions to do UK-based outreach in order to expand their market, contribute to create a global profile for institutions among a number of aspects that can help embrace OER from a broader perspective.

Faraón Llorens and Juan José Bayona
07-05-2012

By: Daniel Villar-Onrubia, *Oxford Internet Institute, University of Oxford, UK*
Podcast:
http://www.youtube.com/watch?v=xZar7BT7Ykw

[Note: The opinions expressed here are those of the interviewee and interviewer.]

Faraón Llorens is a Professor in the Department of Computer Science and Artificial Intelligence at the University of Alicante, where he was Vice President of Innovation and Technology between 2005 and 2012. Throughout this period he was responsible for developing a strategy to promote innovative educational practices and the integration of digital technologies in the field of teaching, research and university management. One of the central aspects of this strategy has been promoting open knowledge (for more on this strategy see the case study included in this compendium). Over recent years Faraón Llorens was also the Executive Secretary of the Sectoral Committee on Information and Communication Technologies of the Conference of Rectors of Spanish Universities (CRSU), between 2010 and 2012, and coordinator of the annual report "UNIVERSITIC: ICT in the Spanish university system."

During the conversation we also were accompanied by Juan José Bayona, who is Professor of Financial Law at this university and has been Director of the Library, one of the key services in the process of implementing the strategy for open dissemination of the open knowledge promoted from his Vice-Rectorship.

Sustainability, scalability and transversality were some of the issues that arose throughout the interview as key to promoting open knowledge in the Universidad de Alicante.

As Llorens told us, when designing any initiative from the Vice-Rectorship for Technology and Innovation, with the aim of promoting the development of innovative practices, the first step was always to evaluate the benefits of the proposed change. He summarized this principle with the following words: "for changing there must be clear the advantages to do it or the disadvantages to not." In the field of educational innovation the question was formulated as follows: "Will it help the teacher to teach better and students to learn more or in less time?"

For the promotion of open educational practices, for example through the participation the OCW of the university or in the institutional repository (RUA), the benefits could be identified at various levels. On the one hand, both the University and teachers can benefit in terms of prestige and visibility, on the other hand, students benefit from higher quality materials, as extra care is expected from teachers in the preparation of materials that can be available to a potentially global audience. Llorens used the following metaphor to explain these benefits in terms of quality of materials, "before opening the door or the windows of your house you clean them. So these materials placed in open have a final touch, a final polish to improve, and that affects your own students."

Another key point in the strategy of the University of Alicante to promote the participation of teachers in relation to the production of open educational resources was to make sure this practice did not involve a new task added to the teaching and research duties of the teachers, but to incorporate it in an organic and gradual way into their daily activities. As Llorens pointed out: "A professor at the University of Alicante has unwittingly participated in this because he lends his materials to their students since many years ago in a virtual campus, and now what you've said is that he only must improve it a little, that we will advise him, we will help him, that even if he does and puts it open there will be an incentive once a year, depending on the materials you have published, and he really sees it ad hoc not as something that is made to participate in open education but as, with a little bit of added work, what he was already doing."

It is therefore a cross-model, which aims to incorporate the open educational practices and, in general, educational innovation at all levels of activity. In this sense, it requires a great deal of coordination by all organs of government and university management: vice-rectorships, centers, departments, etc.. Beyond the internal recognition or incentives that can be provided from within each university for such practices, Llorens noted the need for greater integration into the national university policies "to achieve support for that it must exist a recognition fom a national level, in this case that values all the time and the amounts invested in teaching, taken into account the time devoted to teaching for a professional promotion, which is not solely time you are in the classroom."

Along the same line, Bayonne noted that "probably is not that open knowledge you need a promotion, but that the existing policies of promotion of certain forms of dissemination of knowledge should be changed because they are giving priority to certain publishing towards open knowledge."

As already noted, one of the biggest incentives for teachers to post open content is the possibility of gaining a greater visibility, which potentially can be accompanied by a greater impact of their work and an increase in the number of citations received. In this sense, visibility has been one of the main arguments used at the University of Alicante to encourage participation in the institutional repository and OCW. Beyond raising the argument in theoretical terms, one of the measures taken was to provide teachers with specific empirical data evidence on the impact of their work. Bayonne summarized the initiative as follows: "We had an action at a particular time that was to design a statistical module in the repository that would allow researchers to know how many downloads were made of their publications and from which countries. What we might say that is nonsense, motivated people a lot. (...) there are research groups that come saying, hey, we are contacting remote locations because they have seen our work through the repository, or through the OCW they knew what we are working in. And that was certainly a very important point."

In addition to pursuing the sustainability of open initiatives seeking to promote organic and gradual integration in teaching and research, this goal has been pursued also through a system described by Llorens as an Ikea model:

> "It's just sort of make it by yourself. I give you everything - the environment, resources, I give you all the support I can, all the encouragement, advice, training - but in the end is just the teacher who sets up that educational pill."

Finally, when asked about the keys to further consolidation of the movement around open educational resources and practices, Llorens highlighted two things: "one is that proposals might not be individual, but institution or even country strategies, not individual actions, and the other that must be a measuring, to know how to do it and how to measure that impact in the classroom. That is, the materials exist, but are they actually used in the classroom?"

Fred Mulder

22-06-2012

By: Dr Andreia Inamorato dos Santos, *Universidade Federal Fluminense, Brasil*
Podcast:
http://www.youtube.com/watch?v=JdxRiLC9PhQ

[Note: The opinions expressed here are those of the interviewee and interviewer.]

Fred Mulder has been the Rector of the Open University of the Netherlands (OUNL) for more than ten years. Since 2010 he is the holder of the UNESCO Chair in Open Educational Resources.

Fred Mulder was the Rector of Open University of the Netherlands (OUNL) from 2000 until 2010. He started to work at OUNL in its pioneering years in 1983. From 1993 until 1996 he was Dean of the School of Engineering. In 1998 he left OUNL for the Business School of Universiteit Twente and returned in September 2000. Dr. Mulder holds the Chair in Open Educational Resources that was established in 2010 by UNESCO.

In addition to his previous position at OUNL, Mulder was also the Chair of the OER Taskforces of the European Association of Distance Teaching Universities (EADTU) and the International Council for Open and Distance Education (ICDE). One of his final contributions as Rector of OUNL was to present Wikiwijis. It was launched in December 2008 by the Minister of Education of the Netherlands as a national OER initiative. Wikiwijis is an open internet-based platform for teachers and acts as a repository of OER and a reference for digital educational resources, where teachers can find open content materials.

Prof. Mulder gave an interview to Dr. Andreia Inamorato dos Santos and shared some of his concerns, experience and initiatives in OER. The interview was conducted in Paris during the 2012 World Open Educational Resources Congress.

Fred Mulder explains that the Unesco Chair is his only job at the moment and he can focus on the educational initiatives around the world. When questioned about what can be done in terms of research, about what is needed, Mulder listed some points that should be investigated:

• Policy issues;
• Language problems;
• Sustainability;
• Contents incorporation;
• Politics;
• Globalization;
• Compatibility;
• Connectivity;
• Engage academics;

When explaining about policy issues, he said that it has limitations because of different policies amongst Governments and Institutions. So, the best thing to do is to offer guidance to them for the exploration, implementation and exploitation of Open Educational Resources (OER), in Government, at international and institutional levels, in all education levels and sectors. This would be done in line with the OU national policy for OER.

The issue of incorporating content is not directly linked with globalization. Compatibility is a technical problem since there are some different systems used and in developing countries the connectivity is a big issue because it is not good enough.

He agreed that the main issue is engaging academics with the business because many of them are still resistant to the changes. When confronted about how to address this, how to explain and how to convince people to join the movement, Mulder says that the best way would be to identify champions in our own universities, to give them room to disseminate what they are doing and try to involve colleagues. In this matter we contribute to knowledge creation, dissemination and the valorization of OER.

He says that the biggest challenge is for the OER movement to achieve its full maturity in many countries, especially in developing countries, because the relevance of OER is enormous. There is still a lot of ground to cover in these countries, with their lack of good learning materials and a shortage of student places, qualified teachers and researchers (www.unesco.nl/nieuws-agenda/nieuwsbrief-1/nieuwsbrief-februari-2011/leerstoel-fred-mulder).

Professor Mulder was announced winner of the 2011 International Council for Open and Distance Education (ICDE) Prize of Excellence awards. The jury awarded him with the Individual Prize of Excellence in recognition of the deep impact his work has had beyond his Institution. The jury also noted that his work has made a significant and visible contribution to the OER movement in Europe (www.icde.org/?module=Articles;action=Article.publicShow;ID=298).

Mary Lou Forward

22-06-2012

By: Dr Andreia Inamorato dos Santos, *Universidade Federal Fluminense, Brasil*
Podcast:
http://www.youtube.com/watch?v=AW_PzNnqPpI

[Note: The opinions expressed here are those of the interviewee and interviewer.]

Mary Lou Forward is the Executive Director of the OpenCourseWare Consortium. The mission of the OpenCourseWare Consortium is to advance formal and informal learning through the worldwide sharing and use of free, open, high-quality education materials organized as courses. The Consortium is a worldwide group of universities, education institutions and associated organizations committed to the ideas of open education and it has around 300 members around the world creating a broad and deep body of open educational content using a shared model.

The OpenCourseWare Consortium is one of the coordinators in the open education movement globally. Collectively, this group has produced about 21,000 open courses and they are coming up with interesting experimental ideas about open education. Its activities are supported by the William and Flora Hewlett Foundation, member dues, and contributions from sustaining members.

Dr. Andreia Inamorato dos Santos interviewed Mary Lou in Paris during the 2012 World Open Educational Resources Congress that took place in June. Mary Lou shared with Andreia examples of successful projects in the world and in Latin America, the challenges of adopting OER, and its possibilities.

Mary Lou mentioned the project of the Delft University of Technology in the Netherlands, which produced video for all their courses in the Water Management program. This content is being used by a University in Indonesia, Bandung Institute of Technology. By using the OCW courses that come from Delft University, instead of creating new courses, they can concentrate on developing experimental activities around Water Management for their students and then create local examples. When they then provide feedback on their experience in the comments on the videos, the rest of the world can understand how to contextualize the theory in different locations around the world. She then compared it with the Flipped Class Model, but this initiative has an intercultural element.

Another example she gave because she thinks it is very interesting is FGV Online, in Brazil. FGV can get a huge amount of data through a program they have, where students complete an open course and print their certificate. With all this data, they realized that they are reaching an audience that they would not otherwise reach, through its formal courses. It could be because of the money, for confidence reasons, but they are not sure yet why these students are not going into a formal program instead of taking advantage of these open courses. There's an obvious desire for people with lower income and lower education level to go through the educational process. They are taking advantage of the open educational courses to meet their education needs and then to move on, hopefully to formal education or just continuing with informal life learning. The data shows that almost 2 million people have printed these certificates.

Andreia asked Mary Lou what the main challenges are for institutions thinking of adopting OER and she named the most common as the institutional managment. Initially when the Management is confronted with OER they think why should they contribute and give their intellectual product away? Sometimes they think they will be undervalued if they use someone else's creation, that's why they resist using OER. Her point of view is that that there's a culture in Higher Education now that says sharing is not good when you are teaching but it is great when you do research.

According to Mary Lou, they need to work on this culture and help the faculty understand that when they research they build on other people's work, why not when they teach? There's an abundance of information nowadays and the universities need help understanding that it is not about information scarcity anymore which is how education is been run for the last several hundreds of years. This flip is hard for a lot of administrators to make.

When naming the possibilities of OER, she talked about the benefit of it. She says that people don't have to invest their time, reinventing something that's already invented. A student, a professor or an academic can use their energy to make something new, to make something different, or to expand their understanding of a subject that they may not have time to do, when they benefit from what other people have done. And the best benefit in her point of view is that you can learn a lot about people when appreciating cultural differences and cultural nuances through education, through their approach to education and through their presentation of education.

This is influenced by her background in intercultural studies. She worked as Dean of African Studies for SIT Study Abroad. While she was in this position, she provided academic and strategic leadership in 29 programs across Africa. Prior to that position, Mary Lou lived for six years in Madagascar and served as Academic Director for undergraduate programs in Madagascar, focused on Environmental Studies and Cultural Geography and has also worked on community-based development in Africa, with an emphasis on the incorporation of appropriate technologies and sustainable resources in small-scale enterprise development.

Pedro Aranzadi

11-05-2012

By: Daniel Villar-Onrubia, *Oxford Internet Institute, University of Oxford, UK*
Podcast:
http://www.youtube.com/watch?v=z2yPL7c7DRg

[Note: The opinions expressed here are those of the interviewee and interviewer.]

Pedro Aranzadi is Managing Director of Universia Spain and responsible for technology in Universia globally. In 2011 he was awarded the Leadership Award of the OCW Consortium for his contribution to the development of OCW initiatives.

Universia is the largest universities network in the Spanish and Portuguese languages. It consists of 1,232 partner universities from 23 Latin American countries, representing 14.3 million university teachers and students. Universia seeks to promote change and innovation within companies and the university community. In recent years Universia has been a key player in promoting the development of OCW initiatives between universities in Spain, Portugal and Latin America, so that at this time a large percentage of the universities attached to the OCW Consortium come from the Latin American space. In this interview Aranzadi talked about the most important aspects of the role of Universia, as well as their views about the evolution of movement around open educational resources over recent years.

Universia's involvement in this area dates back to 2003 when the OCW project at the Massachusetts Institute of Technology (MIT) was still in its infancy. At this early stage Universia signed an agreement with MIT for which it undertook to translate a selection of more than 100 courses into Spanish and Portuguese, available on http://mit.ocw.universia.net.

In a second stage, in 2007, Universia adhered to the newly created OCW Consortium and became a regional consortium, with the aim of publicizing the project among Latin American universities and encouraging them to put in place their own OCW initiatives.

As a cornerstone of the OCW consortium Universia launched a website in order to add via RSS courses published by all Latin American universities that are part of the consortium. In the first phase Universia also took charge of the translation of the metadata of all courses into 14 languages.

Universia has also tried to stimulate collaboration between universities attached to the Latin American consortium, organizing meetings and also providing an intranet where the managers of OCW initiatives may discuss common concerns such as organizational, technological or legal issues among others. In addition, it also provided advice regarding the implementation of the management teams of this initiative at each university, through calls to OCW offices.

At this moment the financial support of Universia to the development of OCW initiatives is an annual award organized along with the Spanish Ministry of Education which aims to reward high quality OCW courses produced in the Spanish universities.

Having worked intensively at the start to bring the OCW initiative to Latin American universities, especially to those from Spain, Universia Spanish is in a unique position to know the main motivations for joining the initiative. Aranzadi says that the marketing, internationalization and the prestige of participating in a project initiated by MIT are the main incentives for the universities.

"It will not take you out of the poverty to be in OCW, but this is a sign of the times. You can not be out. As far as it can, we believe that every institution must be at least closer to this matter, if not involved at 100%, at least alert and restless. "

Referring to the factors that distinguish those universities that have stood out more for their degree of development of OCW initiatives, Aranzadi says:

"An 80% of success has to do with how and how much the rector believes on that."

As for the possibility of making OCW initiatives sustainable in the long term, he indicated that it is a tricky issue, "because now of course it is not, because nowadays you can not put back the costs." One possible way is to provide some kind of evaluation and certification requiring the beneficiaries to pay a fee, which is now beginning to be explored for what is called free massive courses over the Internet (MOOC- Massive Open Online Course). According to Aranzadi this model could help universities not only make publication of open educational content sustainable, but also generate large sums of money.

However, according to Aranzadi this is a scenario that may tend to the monopoly of a few universities, in which institutions with less visibility may have little margin to position themselves in a global market:"If you lose the train you lose your chance. Not possibility of reattach. There is still time, obviously. I think we are at a pre-pre-embryonic stage, but if you dawdle you're over. "

To illustrate this point he presented a possible parallelism with the language certifications, in which a few players offer the titles that have become de facto standards, such as TOEFL or IELTS in relation to English: "In this [the MOOC] happens the same, if Harvard gets to certify I think it will be very difficult for other universities to make competition against". However, Aranzadi noted that "language is a great opportunity, if we consider the number of Spanish and lusophone speakers".

While language can be an opportunity for further consolidation of open initiatives, as far as main challenges, Aranzadi pointed the current economic crisis: "There are more pressing concerns (...) I understand that putting subjects in open, unless they were part of a strategy in any sense, is not a priority".

Robert Schuwer

27-06-2012

By: Dr Andreia Inamorato dos Santos, *Universidade Federal Fluminense, Brasil*
Podcast:
http://www.youtube.com/watch?v=6BVuoDorT1k

[Note: The opinions expressed here are those of the interviewee and interviewer.]

Robert Schuwer is an Associate Professor at the Open University of the Netherlands (OUNL). His background is in Mathematics and Computer Science and he has a PhD on the subject of knowledge based systems. Since 2006 he is working on Open Educational Resources Projects, first at the Open University of the Netherlands but then in some national projects where OU is a part of it helping to implement OER projects.

Dr. Andreia Inamorato dos Santos interviewed Dr. Robert Schuwer, via Skype, on June 27 2012. Robert talked about some projects he is involved in in the Netherlands, when it started, its goals, its costs and results, and provided some useful information about difficulties they have been through. As an expert on Open Education Resources, Dr. Robert Schuwer is very sensitive to the OER initiatives and has a lot to contribute.

The first project he undertook was in 2006 and is called OpenER, which means "more than open", in Dutch. They could not use the word OER for their project because in the Netherlands it has already a meaning, a research word used with regulations for examinations in the educational system.

OpenER was launched on December 2006 and its objectives were lowering thresholds for access to formal HE and widening and increasing participation in HE. By offering high-quality short courses as Open Education Resources, developed for self-study, their main goal was to bring at least 5% of these students into formal academic HE.

The main question to be answered was if OpenER had any effect on participation in Higher Education. They found that 9% of the students who did a short course at the Open University of the Netherlands at that time started to participate in some regular HE. From the beginning of the project until 2008, OpenER had close to 1,000,000 visitors, generated a lot of publicity, had 25 courses online and 5,700 users registered online (http://ocw.tudelft.nl/ocw/about-opencourseware/events/ocw-seminar-2009/presentation-robert-schuwer-ounl).

By accessing and using OER in the format of short courses, like Open Course Ware, they had some students registering for the courses themselves. When registering themselves for formal courses people were asked about their reasons for registering for it: "Was taking a free OpenER course the reason for registering for this course?" 9% of students enrolling on a formal course answered this question positively, but it is difficult to isolate the variable in the enrollment decision because the question: 'Would you have enrolled if you have not had the experience to use OER, to study with OER?" wasn't asked.

Robert explained that the OpenER project had two sources of funding, one being the Directorate for Learning and Working, (established by the Dutch Ministry of Education, Culture and Science and the Ministry of Social Affairs) which contributed € 500,000, and the William and Flora Hewlett Foundation, which contributed $250,000. The money was used from 2006 until 2008 and according to Robert it was absolutely essential to have external funding at that time because the Open University of the Netherlands only agreed with the project if it was funded by external organizations.

He explained some of the problems they experienced when creating OER, what was efficient, what did not work, the difficulties in creating common licenses, remixing materials and all the knowledge they gained with the project. There were several ways that courses were produced: one way was to isolate a part of a regular course and offer it as an Open Course.

The administrator was responsible for producing courses, and would approach the relevant person about using a particular course, and would know how to use copyrighted material as open because most of the copyright holders for those materials had already given permission to publish on open license. But there were also courses that were created from scratch with people coming to the administrator with their material ready. However some people were not aware about the need to look for the type of license material they were using for their own work was published under. According to Dr. Schuwer, that was the problem with license remixing they've faced during the project, the type of Creative Common license used.

After two years the OpenER project finished and it did not receive any further funding so they had to think of a strategy for making the project sustainable. The main idea was to give away some of the content and earn it back with services around it.

In 2009/2010 they started their second initiative, called Open U. It is not an OER project like the traditional ones, it is more about reshaping organizations, changing them from being product oriented to service oriented and targeting several groups, not only students. The aim of this initiative is to offer OER as part of an experiment in attracting people to become paying customers, to buy services around it or to buy regular products because they don't offer all materials as OER, like Massachusetts Institute of Technology (MIT) does.

According to Robert, the goal is that 10% of the course is free and the rest would be obtained upon payment and this percentage would be used to attract new customers. Other types of materials would be available, not only course materials, like math classes customers can take for free or sections from Professors on special topics. There are regular materials, course materials, which are not part of the service, but there are charges for certification, charges for some of the content, and for exams. Some companies want to use these platforms for their internal staff as a kind of professional development.

This project is still in its experimental stage with two faculties currently using it. It is being evaluated and at the end of the year it will be decided whether it continues or not. If they continue with the project they will need to decide in what way they will proceed because the contract has changed a lot due to the economic crisis and the huge changes from the Government with regard to universities, who now have to re-evaluate how to continue their business in the future. At the moment, because of external influences, there is a lot of hesitation as to whether to continue and how to continue offering OER.

Andreia asked him about the best practices for staff engagement and Robert said that people should get enough time to do the extra work, to convert those regular courses into OER. It is not something that should be done in their free time. In his opinion that is the most important thing and the support from management is crucial. In his experience with the Open U project, one of the key success factors was that the top managers were taking the initiative, standing behind the initiative. They were involved and it was not something just one faculty wanted to do but it was something implemented in the OU with the support of the top management. These two practices are the key success factors because without this it would be much harder to accomplish what was achieved in the past two years.

Another challenge Dr. Robert Schuwer is facing is the implementation of the WikiWijs initiative, an open education portal designed to share digital resources between the primary, secondary and postsecondary sectors of education that has been launched by the Dutch Government.

CONCLUSIONS

Dr Andreia Inamorato dos Santos, *Universidade Federal Fluminense, Brasil*
Dr Cristóbal Cobo, *Oxford Internet Institut, University of Oxford , UK*

The OER initiatives promoted over the last decade have created new and diverse possibilities for knowledge sharing practices. Apart from technological development, one of the most remarkable changes is evident in the new types of licenses, which recognise individual authorship but not exclusive property rights, thereby facilitating innovative modes of knowledge exchange. An increasing interest in sharing and open access to academic/educational resources has been supported by a growing number of higher education institutions, which have promoted the principles of openness and free access as drivers of knowledge exchange.

The case studies and interviews presented give us an insight into the processes, procedures and technological choices of higher education institutions in Latin America and Europe. These actions have been implemented in order to develop or consolidate their OER initiatives and foster open educational practices among staff members, students and the broader community.

In all cases there have been remarkable contextual differences which translated into a diverse set of practices and a pool of resources collected, created and used in different ways. Perhaps one of the major challenges for the OER movement to be translated into open educational practices is that there is not a single way of doing things, nor a recipe that can be followed through which guarantees success. And in fact, we do not believe there should be. Such diversity and richness of choices, all contextually driven, provide OER users, learners and educators with rich material upon which to draw, embedded in the plurality of practices and freedom of expression which are the values lying at the core of higher education.

When analysing the case studies presented in this compendium the approach we took was to observe the uniqueness of each case and what they could be used to exemplify within a wide range of important issues that one needs to consider when thinking of adopting, remixing and using OER.

The elaboration of this Compendium was also done under the understanding that there is a significant gap to overcome between the rhetoric that refers to OER and the challenges that are faced by those who build institutional OER initiatives. That is why this work has focus on creating a database of experiences that can be relevant for the Latin American higher education institutions, not only in terms of providing clues to answer 'why' and 'how' to implement OER initiatives but also exploring to what extent these initiatives can contribute to long term OEP.

This Compendium does not provide a comprehensive review of practices in LA or Europe. Rather, our aim was to create a manageable sized and easy to read document, which highlights some of the most varied and illustrative cases among the higher education community interested in OER and OEP in the region. In addition, this work brings examples from Europe where four of the universities that collaborate in the OportUnidad Project are based. In the cases presented we are glad to have found a vast array of day-to-day discussions of the most internal and institutionalised aspects of OER implementation, ranging from value for the institution, staff engagement, financial investment and return for the community. We have therefore, based on our own OER experience and in the discussions presented in the cases, selected key themes highlighting the experiences, contexts and points of view that we considered can provide interesting contributions.

CHANGE IN THE ORGANIZATION'S CULTURE

It seems to be often the case that if higher education institutions want to embark on OER provision and use some profound changes are needed. Most of these changes take place over time and are embedded at different levels of the institution: managerial, educational (teaching and learning) and cross-cutting these two, at the cultural level. It is likely that when changes reach transformations in the culture of the organization, these longstanding effects are also perceived by the staff members, students and the wider community.

This type of organizational culture change has been made evident by some of the cases presented, such as the OpenLearn of the Open University UK, OpenER of the Open University of the Netherlands and Unicycle of Leeds Metropolitan, to cite a few. The OER initiatives in these institutions have led to a growing awareness and change of attitude of staff members in relation to producing, sharing and using OER. The positive attention the projects received from the general public have also contributed to the change of culture.

MIDDLE AND LONG TERM STRATEGY

A middle and long term strategy for OER implementation is essential for the clarification of the goals of the initiative and sustainability assurance. The University of Alicante embarked on an ambitious process of strategic institutional change over four years (2005-2008) based on the uptake of digital technologies to enhance teaching, learning, research and management. The process consisted of four phases: observation of relevant worldwide OER initiatives (2005), design of projects (2006), implementation (2007) and evaluation (2008). Success seems to be more certain if the activity is aligned with the institutional strategic priorities, its vision and mission. OpenLearn, for example, was in line with the Open University's mission of being open to all and to widen participation in education.

NEW BUSINESS MODELS AND CERTIFICATION

OpenER of the Open University of the Netherlands (OUNL) shows how the provision of services around the offer of OER can help increase university revenue and registrations and therefore explore new business models. Learners can buy extra content, certification and tuition. Over 40% of their survey respondents said that after using the platform OpenER and the open resources available they have applied for a formal study programme or bought some course at the OUNL. A formal exam at OUNL costs 50 Euros.

A similar case can be found at UTPL, where the certification is charged according to administrative costs and homologation expenses, to include tutor, secretariat, and academic management.

EXTERNAL FUNDING

Receiving funding from foundations or research and teaching funding bodies seems to be one of the driving forces for the initial set up of OER initiatives in Europe. OpenLearn, OpenER and Unicycle have received initial funding that lasted for 2 or 3 years and then had to find ways in which to embed the costs of OER production into the universities' own budget. UOC and University of Alicante have set up the initiatives out of their strategic and budgetary plans from the beginning, having perceived the indirect value of offering OER, which can be translated into new possibilities of teaching and research, continuous development, technological advancements and increasing institutional reputation and visibility.

STAFF ENGAGEMENT AND INCENTIVES POLICY

Drawing on the motivations of staff members who already perceive the value open educational resources can be a good strategy to support initial project implementation. Financial incentives and professional recognition are likewise important factors in staff engagement.

As was seen in OpenSpires at Oxford University and the Alicante University cases the incentives to collaborate in OER initiatives can be either monetary (i.e. bonus, award, etc.) or non-monetary (i.e. institutional or peers recognition, training, etc.). Nevertheless, one of the more effective motivators observed in the case studies was the support and collaboration community, peers or colleagues.

COMMUNITY BUILDING AND PEER-BASED COLLABORATION

One of the outcomes of OER initiatives is that it allows for local and global collaboration via the Internet. TEMOA aimed at building a platform which would facilitate academic collaboration, as well as provide communication and socialisation tools. In the OpenLearn users also have access to tools that support learning and research, such as the Compendium, a mind mapping software and FM, a web-based videoconference tool, both developed by the Open University itself. Learners can also create their own learning clubs and build learning communities of virtual peer learners, interested in similar subject areas.

The TECA_CEDERJ case describes an innovative experience of OER provision and use from universities gathering together in a consortium format. The exchange of quality-controlled resources between the universities for teaching and learning purposes represent a successful experience in reuse and a new model of accreditation, which is based upon learning from open content framed within a formal accreditation process by means of traditional course enrolment, tutoring and assessment. However, this model can evolve into a variety of other formal and informal ways of learning and accreditation, once the repository matures and enables users to find and deposit resources more easily.

Collaboration is a key word for successful practices in OER and OEP, both between staff and institutions. Once staff engagement is in place more consistency and sustainability of OER practices can be expected. In other words, when the educators are motivated , to adopt OER practices, it is more likely that newcomers will be attracted by the idea of collaborating. Here the creation of communities of practise and horizontal collaboration play a key role.

LICENSING AND OPEN PUBLISHING POLICIES

Through the offer of OER universities have started to create clearer policy statements about the use of content on their websites. UOC for example has approved politics of open access which is favourable to the open publication of the academic production of the university. This politics is valid for staff members and includes the publication of research students' theses and papers.

The adoption of institutional endorsement of common licensing can activate and facilitate a more dynamic and better-coordinated participation of the content producers, in this case educators, researchers and students who are continuously generating and re-purposing new educational contents.

OER provision and use is also perceived as an opportunity to expand learning beyond the boundaries of traditional education. The OER initiatives described in this Compendium suggest a need for a new understanding of access. The increasing availability of OER allows these initiatives to reach wider online communities, thus strengthening institutional online presence and new forms of academic recognition and authority.

Nevertheless, the OER discussion is not without its challenges. A broader appropriation of OER by the academic community is still undergoing a process of consolidation. A more consistent adoption will require that those organizations that support OER practices will be able to face inter-institutional and multi-cultural boundaries. The adoption of OER operates within contextual factors that vary according to organisational, economic, cultural, legal or academic factors. Hattaka (2009) identified several barriers that affect a broader adoption of open content: educational rules and restrictions, language, relevance, access, technical resources, quality, intellectual property, awareness, computer literacy, teaching capacity, and traditions. However, the OER discussion is not a static phenomenon, and this Compendium opens up the possibility to further discussions and will hopefully help increase the interest in this topic.

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[1] Hatakka, M. 2009. Build it and they will come? – Inhibiting factors for reuse of open content in developing countries. The Electronic Journal of Information Systems in Developing Countries 37, no. 5: 1–16.

Editors

Andreia Inamorato dos Santos

Andreia is an international consultant in distance education and technology-enhanced learning, and a researcher in open educational resources and practices. She has research papers and book chapters in education and particularly in open educational resources (OER), to include a national report about Brazil published by UNESCO IITE http://iite.unesco.org/publications/3214695/ She is a research consultant for the European- funded OER project OportUnidad in Brazil, as well as a member of its steering committee. The project partners with the Fluminense Federal University in Brazil. She is also a consultant in distance education at the Mackenzie University in São Paulo. Andreia holds a PhD from the Open University of the United Kingdom. Her thesis in the field of Educational Technology was focused on the discourses of teaching and learning online. She holds a Masters in Educational Technology from the same institution (2003). She has worked as a researcher for the OpenLearn and OLnet OER projects of the Open University (2006-2011). Andreia holds a Masters in Linguistics and Literary Studies in English from the University of São Paulo (USP - 2001) and has worked as a lecturer in English language and English and American Literatures from 1997 to 2001.

Cristóbal Cobo

He is research fellow at the Oxford Internet Institute – University of Oxford, where he coordinates research on innovation, open knowledge initiatives and future of learning research projects. Currently he works on Internet Science, OportUnidad, KNetworks and SESERV (European Commission). Cristobal has been distinguished by the British Council of Economic and Social Research (ESRC). He has PhD "cum laudem" Communication Sciences at Universitat Autònoma de Barcelona. Co-author of the book "Invisible Learning" (with more than 30,000 downloads).

Celso Costa

Celso Costa has a Bachelor's degree in Mathematics from Universidade Federal do Rio de Janeiro (1976)- UFRJ. He holds a Master (1977) and Ph.D. (1982) degrees also in Mathematics from Instituto Nacional de Matematica Pura e Aplicada - IMPA. He was visiting Professor at the Université de Chambery, France (1987-1988) and the Université de Grenoble - France (1988-1990). Costa is a member of the Brazilian Academy of Sciences (Academia Brasileira de Ciências). He also received a Commander's award in the National Order of Scientific Merit by the Ministry of Science and Technology. His research focuses on Differential Geometry, in particular the theory of minimal surfaces. In 1982, he discovered an embedded minimal surface, which was named Costa's Surface. It solved a 206 year-old open problem in the field. Costa is also highly committed to distance education programmes, having served as vice-president of the CEDERJ Consortium (UFF, UFRJ, UNIRIO, UERJ, UFRRJ and UENF) from 2000 to 2006. He coordinated the Distance Education Bachelor of Mathematics Degree at UFF - Universidade Federal Fluminense, from 2001 to 2006. From April to November 2006, he served as the evaluation committee's rapporteur on the first bidding for the implementation of the Open University of Brazil. Since July 2007, Costa has held the position of General Coordinator of the Open University of Brazil and since February 2008, the position of Director of Distance Education at CAPES (Coordination of Improvement of Higher Education Personnel). He is currently the Director of the Institute of Mathematics and Statistics at UAB and the coordinator at UAB/UFF.

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